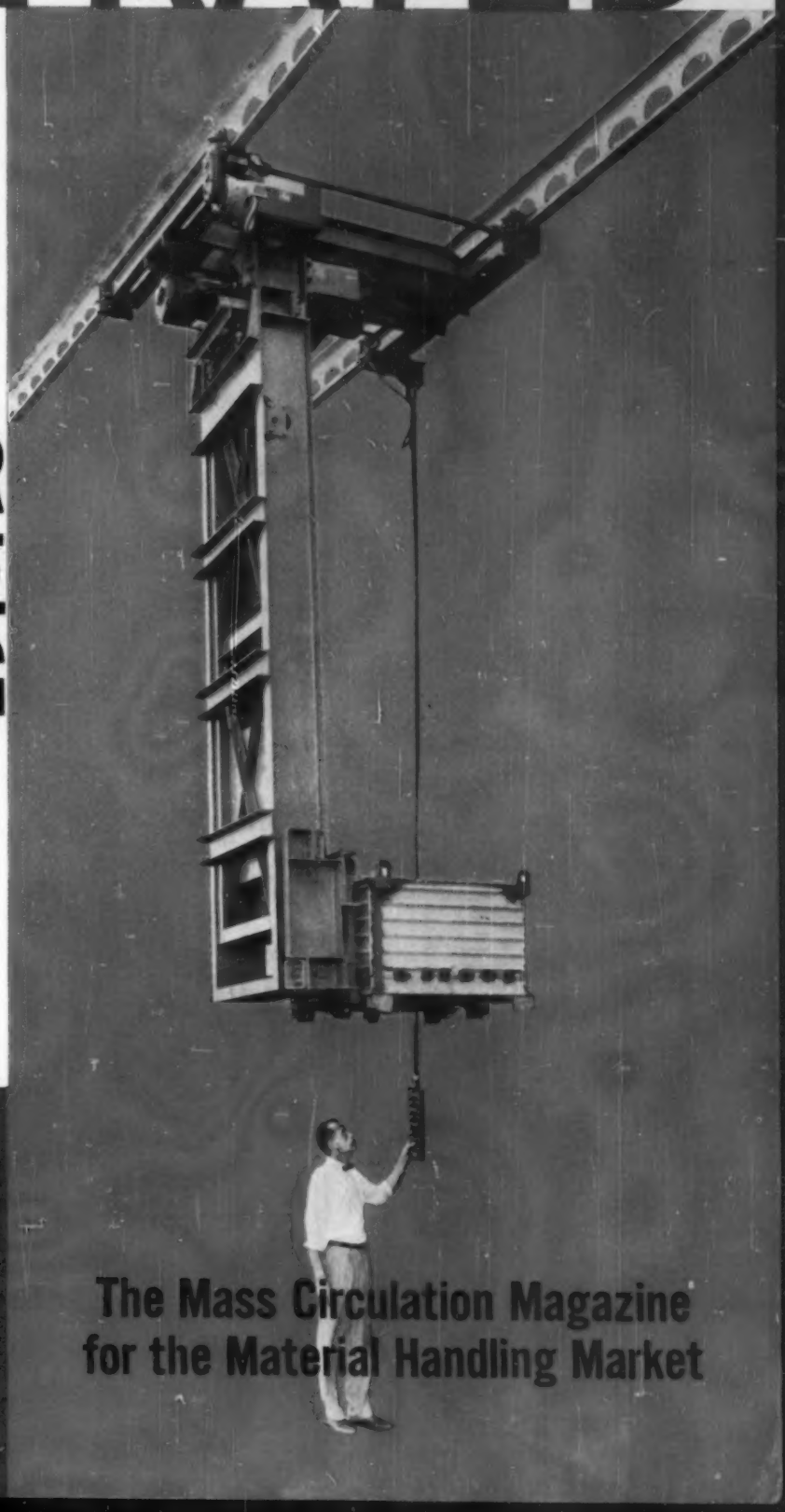
AUGUST / SEPTEMBER 1960

MATERIAL HANDLING ILLUSTRATED

AN INDUSTRIAL PUBLISHING CORPORATION MAGAZINE



STACKER CRANE HANDLING

see contents page 2

The Mass Circulation Magazine for the Material Handling Market

UNIVERSITY MICROFILMS INC
STEVENS HICE
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Form 3547 Requested
Material Handling Illustrated
330 Central Building
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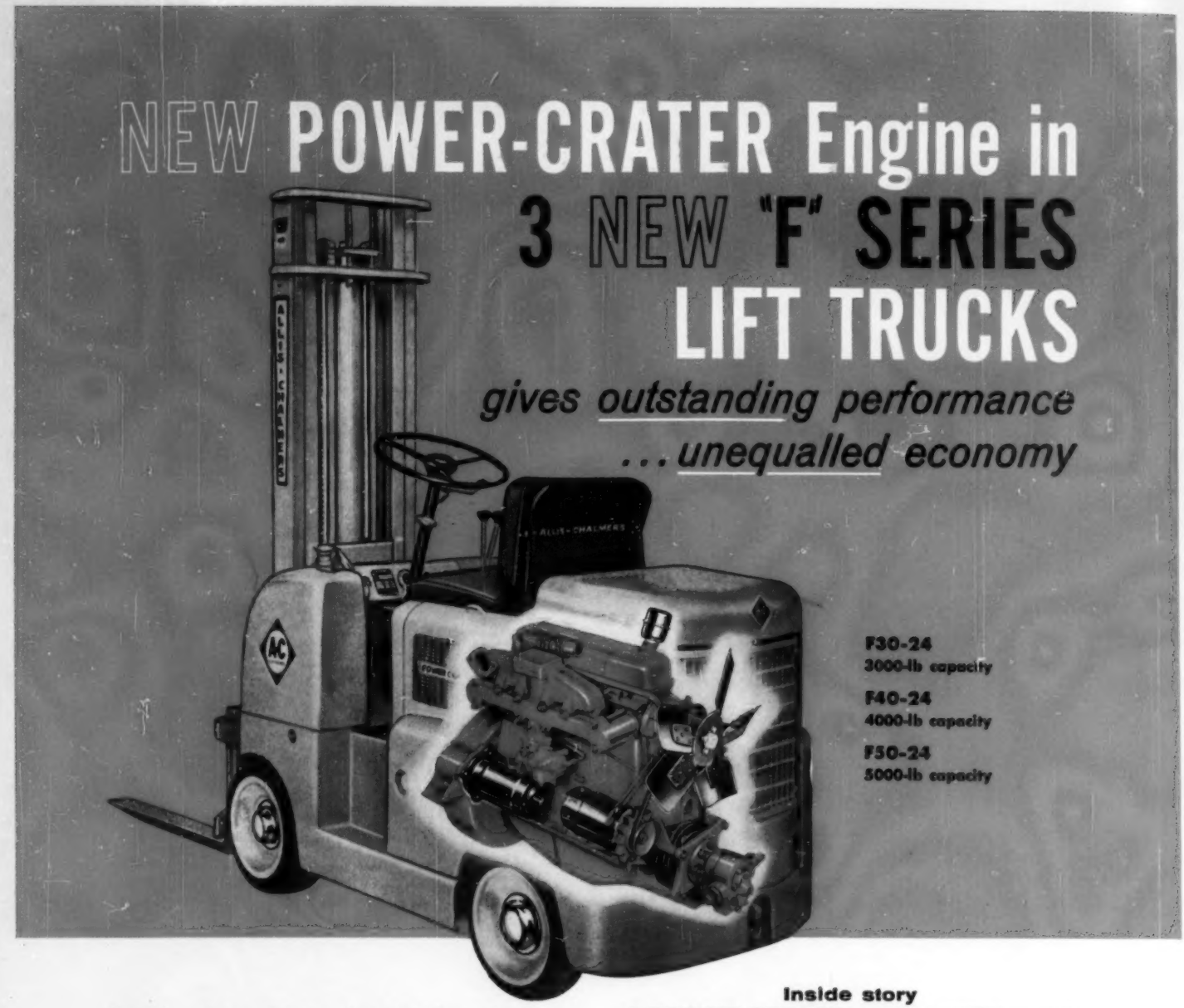
NEW POWER-CRATER Engine in 3 NEW "F" SERIES LIFT TRUCKS

gives outstanding performance ... unequalled economy



F30-24
3000-lb capacity

F40-24
4000-lb capacity

F50-24
5000-lb capacity

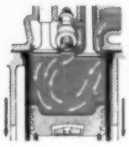
Superior mixing of fuel and air in POWER-CRATER engine gives the new "F" series trucks maximum power out of every drop of fuel . . . also a new high in combustion efficiency resulting in new fuel economy.

Greater power, coupled with proper balance and weight distribution, results in top all-around performance.

Let your Allis-Chalmers dealer show you what the POWER-CRATER engine — plus other outstanding features of the new "F" series trucks — can mean to you in terms of performance and savings. Send for Bulletin BU-640. Allis-Chalmers, Milwaukee 1, Wisconsin.

POWER-CRATER is an Allis-Chalmers trademark.

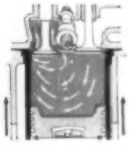
Inside story of POWER-CRATER engine performance



1
EFFECTIVE MIXING of fuel and air begins during intake, with swirling turbulence set up by unique crater-shaped piston — an Allis-Chalmers development.

2
FINAL THOROUGH BLENDING takes place during the compression stroke, as the violent turbulence continues.

3
COMPLETE COMBUSTION results from this proper blending of fuel and air.



4
QUICK-CLEARING EXHAUST— burnt gases clear rapidly and completely through large clear-flow manifold, permitting maximum air-fuel charge on intake.

BH-141

ALLIS-CHALMERS

***POWER* FOR A GROWING WORLD**

Circle 4 on Reader Service Card

You're looking—up through heavy plate glass—at the kind of shop or yard debris that makes short work of ordinary lift-truck pneumatics. The hazards of the worst brickyard or foundry litter—jagged steel, bricks, nails or what have you—can be reduced to a minimum with STEEL GUARD Tires.

First place, each STEEL GUARD has its own built-in puncture-barrier of heavy, webbed steel cable—right up across the shoulders. And that's embedded solidly in the rubber just above the plies.

Then, there are the thick, rugged lugs of the STEEL GUARD. They make for a tread design that absorbs most any kind of punishment—and provides extra-traction when the going's slick.

And remember – these STEEL GUARD Tires are industrial *pneumatics* which mean a smooth ride for driver and cargo – plus exceptional stability and flotation. Yet they are practical for use where you would only be inviting trouble with ordinary pneumatic tires.

Wouldn't it pay you, then, to look into this new kind of pneumatic industrial—the great new STEEL GUARD by Goodyear. Check with your Goodyear Dealer – or write:

Goodyear, Industrial Tire Sales, Akron 16, Ohio.

STEEL GUARD TIRES BY

GOODYEAR

Steel Guard—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio

MORE TONS ARE HAULED ON GOODYEAR TRUCK TIRES THAN ON ANY OTHER KIND

Circle 38 on Reader Service Card

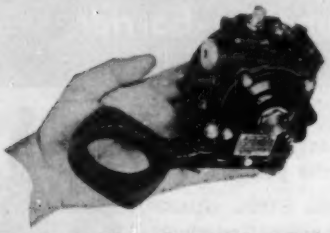
INVESTIGATE!

BEAM LP-Gas CARBURETION

BEAM
CARBURETION SYSTEMS

- Easiest to Install
- Most Compact in the Industry
- Offer Many Exclusive Advantages

For instance, the Beam Model 60 Vaporizer-Regulator is only 4" in diameter, 3" thick and weighs 24 oz. It handles all engines up to 60 hp.



The Beam "Water-Runner" installation system saves time, cost and space.

Beam has the most extensive line of complete, ready-to-install carburetion systems in the Industry.

CONVERT WITH BEAM
Write today for complete details and specifications for your equipment.

THERE'S A BEAM OFFICE NEAR YOU

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Circle 9 on Reader Service Card

MATERIAL HANDLING ILLUSTRATED

VOL. 9 No. 4 AUGUST/SEPTEMBER, 1960

TABLE OF CONTENTS

FEATURES

Useful Literature 4
Handling Highlights 8
What's New in Equipment 11
Rack-Em Stacker Saves Space 14
The Big Box—A Versatile Friend 16
Beer in Units of 1 Ton 18
The Handy Yard Crane 20
Photo Feature—On New Freight Bracing Method 39
Advertisers Index 40

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HYSTER

Now! Monotrol on Pneumatics — *Only* HYSTER® has it!

EXCLUSIVE MONOTROL CONTROL SYSTEM—Performance proved on Hyster cushion tire trucks—now available on pneumatics.

FAST, SAFE HANDLING—Driver's right foot controls acceleration—forward-reverse. Left foot controls *braking*—truck *inching*. Hands free for full-time steering and load control.

EASIEST TRUCKS TO DRIVE—Monotrol with Hystamatic transmission means more production per manhour—reduced driver fatigue.

CALL your Hyster dealer for a demonstration.

INDUSTRIAL TRUCK DIVISION—Lift trucks, mobile cranes, straddle carriers
TRACTOR EQUIPMENT DIVISION—Construction and logging equipment
MARTIN TRAILER DIVISION—Heavy machinery hauling trailers
INTERNATIONAL DIVISION—Overseas manufacturing, sales and service

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HYSTER

HYSTER COMPANY
INDUSTRIAL TRUCK DIVISION
P. O. Box 847 Danville, Illinois

NOELTING
Faultless
Casters

L900

DOUBLE BALL BEARING SWIVEL
MEDIUM DUTY

CUT YOUR HANDLING COSTS 3 WAYS

Faultless Casters

SUPERIOR DESIGN FEATURES

1. **CORRUGATED TOP PLATE** . . . fully hardened to give added strength. Slotted mounting hole spacing permits easy attachment.
2. **MAIN LOAD BEARING** . . . consists of 21 hardened, polished balls (⅜" dia.) rolling in large dia. hardened, lubricated raceway permanently attached to caster horn to assure perfect alignment.
3. **LOWER THRUST BEARING** . . . contains 10 hardened steel balls (5/16" dia.). Hardened raceway is machined from bar stock. Ball retainer is hardened formed steel.
4. **EXTRA-LARGE DIAMETER KINGPIN** . . . assures bonus strength in this caster.
5. **CLOSE FITTING, FORMED STEEL CUP** . . . protects thrust bearing from foreign matter. Holds lubricants in bearings, keeps floor clean.
6. **HEAVY GAUGE, FORMED STEEL HORN** . . . easily absorbs highest rated loads and thrust.
7. **FULL SELECTION OF WHEELS** . . . for all types of floors and operating conditions. Bolt and nut axles permit quick wheel replacement when needed.

SERIES L9700 RIGID PLATE CASTER
Wheel types and sizes, load capacities and overall heights to match L900 Swivel Plate Caster.

ASK YOUR DISTRIBUTOR! Your Faultless Industrial Distributor will be glad to serve as your expert on casters and wheels. He stocks Faultless Casters and is prepared to offer "plus value" by recommending the right type, load capacity and wheels to suit your requirements. He is listed in your phone directory under "Casters."

FREE! SEND FOR ILLUSTRATED LITERATURE

Faultless Caster Corporation
Evansville 7, Indiana

Send me Free L900 Medium Duty Caster information.

Name_____
Firm_____
Address_____
City_____ State_____

Circle 36 on Reader Service Card

USEFUL LITERATURE

Captures Lost Space

The Naro-Aisle Stack Model 590 lift truck expands warehouse capacity up to 50 percent. According to the manufacturer, this is through better utilization of existing storage space. Engineering advances enable the new-style lift truck to operate in 6 ft aisles, 4 to 6 ft narrower than those required by conventional lift trucks. "Naro-Aisle-Stack" booklet covers the system in detail.

Towmotor Corp.

Circle 100 on Reader Service Card

Lightweight Hoist

Bulletin ADH-86, illustrated, details six models of the company's new ratchet and pawl design RA Series Safety Pull Hoist. Specifications, prices and dimensions, and accessories are described for the ¾, 1½, 3, 4½ and 6 ton models.

Coffing Hoist Division
Duff-Norton Co.

Circle 101 on Reader Service Card

Converts Warehouse Pallets To Portable Racks

A design change and a new line of racks which assemble independently of pallets are described in a brochure. Company has introduced Positive Pine Lock on Tier-Rack pallet stacking frames to further secure the top of the rack. Tier-Rack snaps into regular warehouse pallets without bolts, screws, or special attachments, converting the pallets to portable racks. The new line is Porta-Frames, free standing rack sections.

Tier-Rack Corp.

Circle 102 on Reader Service Card

Completely Automatic Crane Scale

The Seal of the Los Angeles County Bureau of Weights and Measures is affixed to every Model P scale. This gives assurance that the unit meets the acceptance tolerance of the U. S. Bureau of Standards for sealable scales. Scale mechanism is based on compound leverage. Bulletin 58E gives details.

W. C. Dillon & Co., Inc.

Circle 103 on Reader Service Card

Portable Electric Hoists

Catalog 15010-15C-59 contains a complete listing of specifications and prices for the new Push Button Control model and the Pull Cord Control Model Budgit unit. These hoists are light weight, and come ready to hang-up, plug-in, and use. Both models are available in capacities

CUT YOUR COSTS WITH THESE PROBLEM SOLVERS

Lead Lifter Series "700" Wire Rope Electric Hoist. Fast, heavy-duty type. Push-button control. Single and two-speed models. All types of suspension, including low headroom. Capacities: ½ to 15 tons.

Lead Lifter Series "600" Wire Rope Electric Hoist. A powerful production helper. Push-button control. Single and two-speed models. All standard suspensions. Capacities: ½ ton and 1 ton.

Push Button Budgit Electric Hoist. Portable. For regular hoisting service. Two fully enclosed automatic brakes. Provides fast, accurate spotting action. A ½-ton load can be lifted at 34 FPM. Hook suspension. Capacities: ⅛ to 2 tons.

Pull Cord Budgit Electric Hoist. Ideal for intermittent service. Has efficient gearing and two brakes. Uses little electricity. Comes ready to hang up, plug in, and use. AC, DC, and 12-volt battery-operated models. Hook suspension. Capacities: ⅛ to 2 tons.

Lead Lifter Air Hoist. Wire rope load line. High starting torque and smooth operation with 5-cylinder radial air motor. Infinitely variable speed control to 37 FPM. Throttle control available. All standard suspensions. Capacities: 1 to 15 tons.

Budgit Air Hoist. Link and roller chain types. Pendant cord control. Speeds infinitely variable to 75 FPM. Rigid mount push trolley available. Safety hooks standard. Capacities: ¼, ½ and 1 ton.

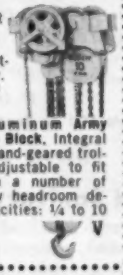
Tugit Lever-Operated Hoist. Light, compact, portable. Easy to operate even in close quarters at any angle. Fine for maintenance. Capacities: ¾ to 3 tons.

Budgit Differential Hoist. Low-priced lifting tool for occasional use where high efficiency isn't essential. Light and compact. Capacities: ¼, ½ and 1 ton.

Budgit Roller Chain Block. Spur-geared efficiency combined with lightness. 45 lb. pull on hand chain lifts ½ ton. Capacities: ¼ to 2 tons.

Budgit Aluminum Chain Block. Light in weight but tough. Can be carried to the job, hung up and operated by one man. Spark and corrosion resistant models. Capacities: ¼ to 2 tons.

Budgit Aluminum Hi-Cap Chain Block. Combine light weight with strength and tops in operating efficiency. Capacities: 3 to 10 tons.



Budgit Aluminum Army Type Chain Block. Integral push and hand-geared trolleys are adjustable to fit I-beams in a number of sizes. Low headroom design. Capacities: ¼ to 10 tons.

I-beam Trolleys. Attach to top hook of hoist to add travelability. Operate on bearing equipped wheels. Geared type available. Capacities: to 20 tons.

Budgit Cord Reel. Supplies current to hoists and portable tools with polyphase motors up to 7½ hp.—single phase to ½ hp. Cable reels off in any direction.

Budgit Cord Conductor Trolley. Use any number to hold aloft and travel any hoist conductor cord or air hose. Fit 8" to 18" I-beams.

MMM Load Scale. Permits weighing loads while in suspension. Saves handling time and costs. Guards against overloading lifting equipment. Capacities: ⅛ to 2½ tons.

Gantry "A" Frame. For low-cost mobile lifting service. Caster equipped. Shipped knocked down. Easy to assemble. Capacities: 1 and 2 tons.

Budgit Crane Assemblies. Top-running, underhung and jib types. Packaged components for erection on the job site. Capacities: to 6 tons, spans to 30 feet.

Budgit Bridge Drive. Converts hand-operated cranes up to 10 tons to "walking speed" electrical operation at low cost. No drilling or machining. Push-button control.

Lead Lifter Jib Cranes. Revolve 360° on ball and roller bearings. No binding. Types that bolt to floor serve 550 sq. ft. Others set in concrete serve up to 1500 sq. ft. Capacities: ¼ to 5 tons.

Lead Lifter Bridge Crane. Electrically operated underhung type with single girder. Spans to 50 feet. Capacities: ½ to 10 tons. Other Lead Lifter Cranes to 50 tons, spans to 60 feet.

TRADENAMES SHAW-BOX, LOAD LIFTER, BUDGIT, HI-CAP AND TUGIT ARE REGISTERED TRADEMARKS

HANDLE MATERIALS MORE EFFICIENTLY and you save time and manpower, increase the safety level and output of your plant, and cut unit costs.

Whatever your overhead load-handling problem, MMM offers by far the most complete variety of modern hoists, cranes and auxiliary equipment available anywhere.

CALL ON YOUR NEARBY SHAW-BOX DISTRIBUTOR for experienced help in selecting the load handling devices that will serve best and save the most in your particular operation. He maintains ample stocks to give you prompt delivery. So let him contribute to the smooth, economical production that is essential to broaden your profit margin. His service is as close as your telephone. Phone him for complete information or write to us for bulletins.

40 L-3

MAXWELL MANNING & MOORE INC. MM&M TRADE MARK

OVERHEAD LOAD HANDLING EQUIPMENT

Products of

MANNING, MAXWELL & MOORE, INC.

Shaw-Box Crane & Hoist Division • Muskegon, Michigan

In Canada: Manning, Maxwell & Moore of Canada, Ltd., Galt, Ontario

Circle 58 on Reader Service Card

How Much Money Can You Save In Your Storage Area?

Diesel oil and gas engine miscellaneous parts efficiently stored in P-S racks.

DEPENDABLE CONSULT PS FOR THE BEST MATERIALS HANDLING EQUIPMENT

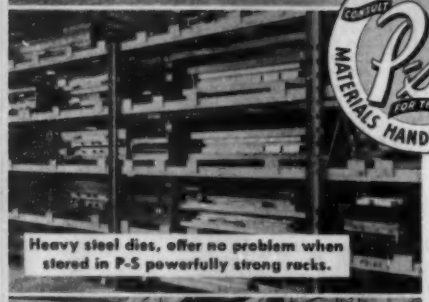
POWERFULLY STRONG

Adjustable

STORAGE RACKS

Simple and Easy to Assemble

- NO BOLTING
- NO WELDING
- NO SMALL PARTS



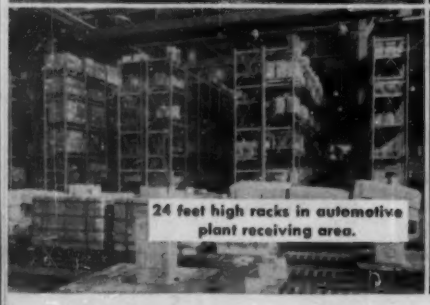
Heavy steel dies, offer no problem when stored in P-S powerfully strong racks.

Designed and built for any type of storage space requirements, to save you time and money by eliminating multiple handling operations. Can be used anywhere, in any size area, in single, double or multiple sections, to store materials of various sizes, shapes and weights. Also can be galvanized for outside use. For rigid, non-sway support, adjustable members lock by hand into double slots set at angle on uprights at level desired. For a solution of your materials handling problem always consult Palmer-Shile.

Storage and simple selection of electrical stock in racks.

Racks may be galvanized for outside storage purpose.

Aluminum and copper being handled in racks adjustable to various height openings.



24 feet high racks in automotive plant receiving area.

DESIGNED AND MANUFACTURED BY

Palmer-Shile Co.

16047 FULLERTON AVE., DETROIT 27, MICH.

Offices in Principal Cities
EXPORT DIVISION
75 West Street, New York 6, New York

Circle 69 on Reader Service Card

USEFUL LITERATURE

continued

ranging from 1/8 through 2 tons. They have various lifts and lifting speeds, come in single or poly-phase electrical currents.

Manning, Maxwell & Moore

Circle 104 on Reader Service Card

Unitized Conveyor

Bulletin 112, 22-pages, details this unitized conveyor, and presents charts and illustrations. The "Handidrive by Standard" makes it possible to order from preengineered standards in stock such items as gravity and power roller conveyors, inclined belt conveyors, drive units, etc. Company says that with its off-the-shelf units you can make additions or alterations as your needs arise, at least possible cost.

Standard Conveyor Co.

Circle 105 on Reader Service Card

Automatic Single Shift Charging

For 12-cell, 24-volt electric industrial truck batteries up to 600 AH in capacity. Bulletin AR-105 describes the AR-12-600 AutoReg charger. It gives specifications and a charging curve.

C & D Batteries, Inc.

Circle 106 on Reader Service Card

Sealed Sanitary Casters

Developed specifically for the food handling and processing industries where equipment sanitation is essential. New line comes in light, medium, and heavy duty models. All are equipped with high capacity floor protective Texite wheels. Wheels are 4 or 6 inch diameter in either swivel or rigid models.

Albion Industries, Inc.

Circle 107 on Reader Service Card

All Purpose Truck Line

The 1960 catalog is in color, showing the complete Wilder line of all purpose trucks. It offers 27 standard style and 150 standard size platform, shelf, tray, rack, stake, bin, box, and table trucks. Complete specifications and illustrations of the entire line are given.

Wilder Mfg. Co., Inc.

Circle 108 on Reader Service Card

Safe Electrification

For overhead material handling equipment. The Safpowbar electrification reduces maintenance and provides assurance against power interruptions. Features include: increased current collector life by five times or more; double insulation to prevent electrical leaks and shocks; three

large electrical contact areas for each collector shoe reduce current density. Bulletin 2016D gives full information.

Cleveland Tramrail Division
The Cleveland Crane & Engineering Co.

Circle 109 on Reader Service Card

Twine Bundling Machine

Tymaster is a high speed twine bundling machine. It's engineered for production line and multi-purpose operations. Has a tying speed of 14-15 bundles a minute. A self compensating twine feeding system adjusts to all sizes of bundles up to 24" high by 39" wide to insure proper tying with no waste of twine. Suggested applications: corrugated cartons, newspapers, reusable cartons, paper bags and shipping sacks, magazines, and lot shipments.

United Shoe Machinery Corp.

Circle 110 on Reader Service Card

Monorail Conveyor Parts

Catalog MCP-60 includes new scale drawings, and covers company's complete line. Included are nonsparking Beryllium trolley wheels, recommended for use in powder, paint, and chemical plants where explosion hazards exist. This is the company's first major catalog revision in several years.

Saginaw Products Corporation

Circle 111 on Reader Service Card

60-Ton Truck Crane

A 16-page catalog 770-TG-2 describes the American 60-ton truck crane. Actual illustrations are taken from large engineering projects and big lifts. Features include fast working air controls, safe brakes, power boom lowering, safety boom stops, and smooth, accurate swing.

American Hoist & Derrick Co.

Circle 112 on Reader Service Card

Additional Values From Pneumatic Conveying

Bulletin I-69 discusses heat transfer, cooling and drying, size reduction and size separation, pointing to many auxiliary uses of pneumatic conveyors.

Sprout, Waldron & Co., Inc.

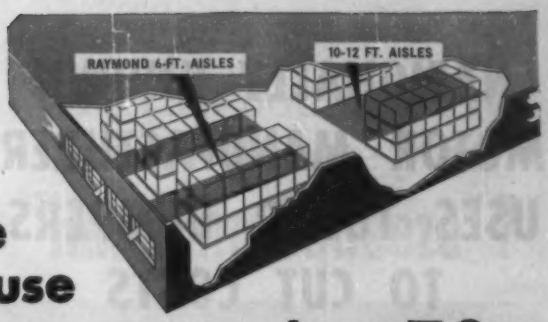
Circle 113 on Reader Service Card

Need An Industrial Scale?

Here are 56 illustrations and descriptions to help assist you in determining what type of scale you need. Scales are grouped by type to facilitate reference to specific models. Specifications and capacities are listed for each. Form 2001E details the full line of Toledo scales.

Toledo Scale Division
Toledo Scale Corp.

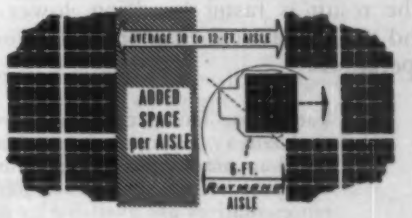
Circle 114 on Reader Service Card



Increase warehouse capacity . . . as much as 50% with RAYMOND® NARROW AISLE Electric Tiering Trucks

WHY BUILD OR RENT! There's space to be had right in your present warehouse. RAYMOND narrow aisle trucks eliminate wasteful 10 and 12 foot aisles . . . right-angle tier pallet loads from aisles **as narrow as 6 feet!** More storage space is gained . . . capacity increased up to 50%.

RAYMOND electric straddle type trucks are extremely compact, have an offset drive wheel with 200° turning radius, permitting close-quarter operation in narrow aisles. 12 and 24 volt models. Capacities: 2,000, 3,000, 4,000 lbs. Low-cost lease/rental arrangements available. Send for bulletin today!



The RAYMOND CORPORATION
30108 Madison St., Greene, N.Y.

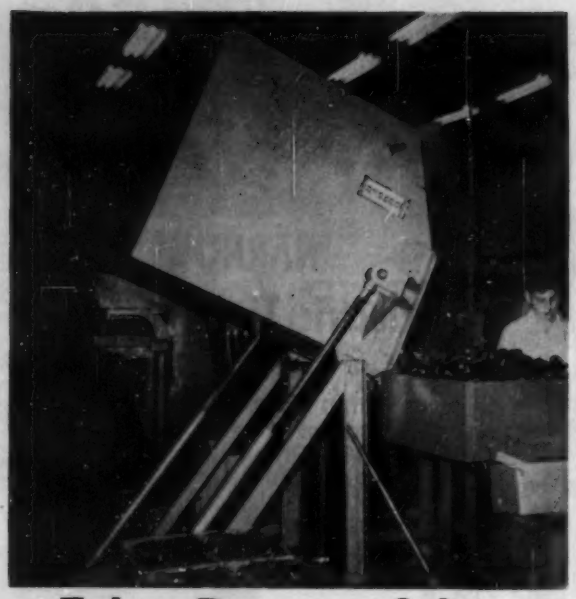
( ) Please send electric truck bulletin

( ) Please send information about lease/rental plan

NAME _____ TITLE _____
COMPANY _____
STREET _____
CITY _____ STATE _____

Circle 71 on Reader Service Card

NATIONALLY-KNOWN MOTOR MANUFACTURER USES TUBAR DUMPERS TO CUT COSTS



Tubar Dumpers Solve Another Handling Problem...

Problem: Supplying an assembly table with small motor parts for production assembly.

Solution: Tubar Dumpers unload the parts on the assembly table directly from the parts trucks. The result is faster handling, lower labor costs, and more efficient, smoother flowing assembly operations.

Use Tubar Dumpers to solve your handling problems . . . cut operating and labor costs . . . speed-up production. We custom-build Tubar Dumpers to fit your exact job needs. Our representatives are available to give you complete information. Write today!

Tubar
ASSURES QUALITY
HARDEN, INC. • DENNISON, OHIO
LIFTS • DUMPERS • CRANES

Circle 81 on Reader Service Card

HANDLING HIGHLIGHTS

Tires With Built-In Puncture Barrier

Goodyear's Steel Guard tires have a built-in puncture barrier of heavy, webbed steel cable. It is embedded solidly in the rubber just above the plies. Circle number for more information.

Circle 38 on Reader Service Card

Hold Truck Loads in Place

Load Stop friction-type jacks reduce damage in transit, and make loading and unloading an easier job. Heavy rubber pads hold the steel bars in place.

Circle 51 on Reader Service Card

Screw Conveyor

Canton Stoker Corp.'s Flo-tubes can be used to move or feed chemicals, coal, gravel, salt, sand, sawdust, sugar, woodchips and other bulk materials at predetermined rates.

Circle 26 on Reader Service Card

Unitized Assembly Containers

Lewis Plastibox containers are smooth, strong, noncorrosive one-piece molded plastic. Available in green or yellow molded-in colors. A brochure is available.

Circle 50 on Reader Service Card

Electronically Dispensed Gummed Tape

This Diagraph-Bradley machine delivers from 9 to 60 inches of 2½ inch to 3 inch tape at a rate of 40 inches per second electronically. Plastic water bottle, dual moistening brushes, foot switch and printing attachments.

Circle 29 on Reader Service Card

Worm Drive Hoists

Ranging from ¼ to ten ton capacity. Has worm drive design, uses quality components, is fully enclosed and compact in construction for low head room and safer action. Electrolift, Inc.

Circle 33 on Reader Service Card

Truck Has What Workers Want

Lighter lifting, easier handling, and easier wheeling are the three big features that add up to more loads moved at lower cost. Information on their line of magnesium hand trucks is yours for the asking from Magline. Just circle the number.

Circle 54 on Reader Service Card

Tote Box is Tops in Economy

The Paige Company's Miracle Tote Box can be shipped and stored flat. Double-walled corrugated construction makes it strong. Will hold all the weight a man can carry. Circle number for more information.

Circle 68 on Reader Service Card

Power Truck Mobility

At a fraction of the cost is offered by Magline Inc. through their line of magnesium pallet dollies. Helps to release your powered equipment for the really big jobs by handling the not-so-big ones. Will handle 4,000 lbs. safely and smoothly.

Circle 56 on Reader Service Card

You Can Convert Standard Pallets

Into low-cost portable racks by using the Sturdi-Bilt pallet racker. Assembles fast, stacks high, handles heavy loads and provides the most rigid racking available.

Circle 76 on Reader Service Card

End the Hazards of Dripping Grease

In your casters by using Bassick casters which have specially engineered lubrication seals. Can be easily flushed and new grease added without disassembly. A four page brochure is available.

Circle 6 on Reader Service Card

3 Top Values

From among the 80 in their line are offered by Big Joe Mfg. Co. The PEDALIFT 21, the 299, and the CHALLANGER. Capacity 1,000 and 1,500 lbs. and lifting heights of 54 and 57 inches.

Circle 8 on Reader Service Card

Low Cost Bag Closers

Bags start the sewing operation when they reach the head. After sewing, thread is automatically cut and the conveyor belt continues to move the bag. A catalog is available from Dave Fischbein Co.

Circle 37 on Reader Service Card

Production Partner in Any Plant

Is the New London Engineering Company's parts conveyor. Easily handles parts and some bulk materials on cleated belts from 4 to 24 inches. The undercarriage is adjustable and detachable.

Circle 66 on Reader Service Card

Dock Bumpers Guaranteed 5 Years

The Durable Mat Company's rubber dock bumpers absorb 81% more impact than wood. Circle card for more information.

Circle 28 on Reader Service Card

Eliminates Waste Motion

Columbian Rope Company's Jet-Pak cushioned-insulated shipping bags require only 15 seconds or less to package semifragile small units ready for mailing. Security cleared by U. S. Post Office drop tests. Can be factory imprinted.

Circle 23 on Reader Service Card

Saved $40,000 A Year

Through the installation of Servis Recorders on lift trucks of one company. Use resulted in reassignment of trucks for greater efficiency and worker's productive time was accurately recorded. Circle number for further information.

Circle 74 on Reader Service Card

Easy One-Man Drum Handling

The Morse drum cradle truck and the Morse drum hand truck are an efficient combination for drum handling. With the truck one man can pick up a 1,000 lb. drum and balance it with one finger. Drum cradle has both front and side openings.

Circle 61 on Reader Service Card

Cut Handling Costs

With Hytrol horizontal and inclined conveyors. Aluminum and steel models. Portable and folding models. Table-top models for assembly operation. Complete optional equipment and attachments.

Circle 43 on Reader Service Card

Make Your Trucks More Efficient

By equipping them with a C&D Slyver-Clad battery. They have the longest and thickest plates in the industry. Hi-Impac cell containers and covers are practically unbreakable. Circle card for more information.

Circle 19 on Reader Service Card

Trucks Engineered to Your Job

Their complete line of trucks, from hand pallet trucks, powered walkies and sit-down rider fork hi-lifts are described in literature from Barrett-Cravens. Circle number for information.

Circle 7 on Reader Service Card

will this double-duty lift truck ease your

"Handling Squeeze"?

No question about it. You will profit in many ways by owning a spectacular new Towmotor *"Van-Stack" Series* fork lift truck. Look what this double-duty truck will do for you.

With the same small but mighty "low-profile" truck one of your operators will . . .

1. STACK any materials ceiling high to save costly storage space!
2. MOVE LOADS swiftly through tight spots inside and outside your plant!
3. DRIVE DIRECTLY into vans, highway trucks and trailers to deposit full loads with least effort—and in much less time!

Write for "Van-Stack" Series Specification Folder #F-2. *Towmotor Corporation, Cleveland 10, Ohio.*

RENT OR LEASE your Towmotor-Gerlinger equipment. Increase profits without tying up working capital. For information contact Towmotor-Gerlinger Rental Division, Towmotor Corporation.

TOWMOTOR THE ONE-MAN-GANG® GERLINGER

FORK LIFT TRUCKS, CARRIERS AND TRACTORS SINCE 1919

Gerlinger Carrier Co. is a subsidiary of Towmotor Corporation

Circle 80 on Reader Service Card

with C&D *Slyver-Clad*® batteries!

You can make your electric trucks more efficient than ever by equipping them with an advanced design power-package—C & D *Slyver-Clad*® battery with *Hi-Impac* covers and containers.

The premium C & D *Slyver-Clad*® batteries have the longest, thickest plates in the industry—that means *extra* capacity. They have *five* layers of insulation and retention that almost end shedding and thus provide extra-life at *full* capacity. And, the *Hi-Impac* cell containers and covers, a C & D exclusive feature, are practically unbreakable.

Trucks equipped with C & D *Slyver-Clad*® batteries with *Hi-Impac* work longer between charges, live longer and resist physical damage. Get the full story on C & D—your better battery buy. Write for Bulletin IT-530.

C&D BATTERIES
of Conshohocken, Pa.... Attica, Ind.
DIV. THE ELECTRIC AUTO-LITE CO.

Manufacturers of Slyver-Clad® Industrial Batteries
PlastiCell* and PlastiCal® Batteries for Communications, Control, and Auxiliary Power
Producers of AutoReg® Silicon Chargers and AutoCal* Charger-Battery Combinations

*Trademark

Circle 19 on Reader Service Card

Circle 1 on Reader Service Card

AMERICAN "Chainless"

PAN OR PALLET CONVEYOR

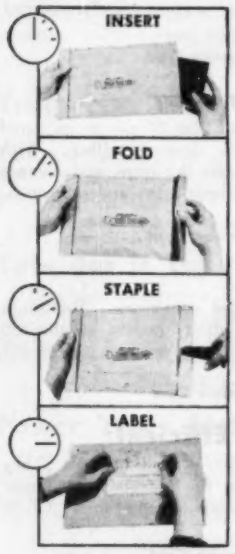
One continuous system — operating at floor, table or ceiling levels — up, down, around curves

One American "Chainless" Conveyor, with a single drive unit, can do work which otherwise requires a complicated system of powered belt or roller conveyors with a number of drive motors and transfer points. The continuous "Chainless" conveyor negotiates horizontal or vertical curves, and can be extended to almost any length. Pallet attachments can be used in place of pans. Eight-wheeled trolleys have exceptional stability. Write for Catalog CD-B.

CONVEYOR DIVISION
THE AMERICAN MONORAIL CO.
Fourth & Franklin Streets • Tipp City 18, Ohio

jet-pak®

CUSHIONED-INSULATED SHIPPING BAG



SPEED CUTS DIRECT LABOR COST!

Only 15 seconds or less to package semi-fragile small units—ready for mailing! Simple and complete—JET-PAK eliminates all waste motion—*speeds* packaging process—cuts labor time to the bone. JET-PAK cushions contents with millions of tiny paper particles held between double-walled, asphalt-laminated KRAFT—completely protects against damage, rain, heat or cold. Security cleared by U.S. Post Office drop tests. Inexpensively imprinted at factory. Very inexpensive to buy. See for yourself.

Send for set of free samples —Today!

Clip this advertisement to your letterhead and mail to:

jet-pak
Packaging Division
Columbian Rope Company
Auburn "The Cordage City" N. Y.

Circle 23 on Reader Service Card

WHAT'S NEW IN EQUIPMENT

Heavy Duty Corners

Collapsible pallet boxes come with 13-gage copper-coated double hinges. The hinges push through two side walls. They lock by twisting ends of the wires. The

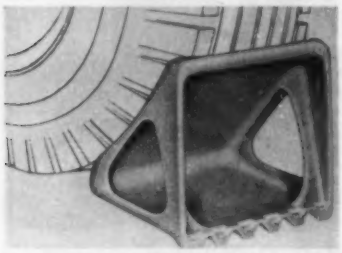
corner collapses without removing the wire hinges. This construction is for shipping up to 5,000 lb. Single wire hinges are for loads up to 3,000 lb.

Bigelow-Garvey Lumber Co.

Circle 120 on Reader Service Card

Improved Wheel Block

An improved safety wheel block grips pavement better, has greater strength, and handles easier. The WB2H wheel block has stronger outermost calks. This pro-



vides instant grip as soon as pressure is exerted on the block. Then the middle calks also engage the pavement. The block will hold heavy trucks, trailers, and other vehicles, when they are being loaded by lift trucks.

Calumet Steel Castings Corp.

Circle 121 on Reader Service Card

Write or Draw

This is a marking natural, a pen-size item with felt tip. You can write or draw with the Marks-A-Lot. It has a special impact-aluminum case. It will mark

prices, labels, or identification on glass, paper, plastic, or wood. And it comes in eight glowing colors. The tube will not spill, smell, or break.

Bradley-Sun Division, American Can Co.

Circle 122 on Reader Service Card

Explosion-Proof Cable Hoist

Powered by rotary vane air-motor, meets all requirements for use in hazardous atmospheres. Cable-Aire Hoists lift ¼-2

tons 20' and 40' with variable speeds. They have complete protection against overload burn-out and neutral return of control valve upon release of rope pendant. Construction is compact.

David Round & Son, Inc.

Circle 123 on Reader Service Card

Low-Cost Pulleys

Low-cost variable speed pulleys take smaller top width belts and sheaves. They come in six sizes, ranging from fractional

to 5 hp. Speed ratios run to 4:1. The pulleys install easily and quickly on old or new equipment. They also allow instant speed changes while equipment is running.

Lovejoy Flexible Coupling Co.

Circle 124 on Reader Service Card

Remote Crane Scale

The load element and indicator are separate units in this overhead crane scale, enabling you to read the dial at eye level. The dial is connected to the element by

up to 50 ft of flexible hose. The element provides for automatic self-alignment under tension. Safety factor is a minimum of five times rated capacity. The scale uses the basic Sensater cell which eliminates troublesome maintenance. It is calibrated and sealed at the factory. The system comes in capacities of 1,000 to 60,000 lb.

Martin-Decker Corp.

Circle 125 on Reader Service Card

Manual Turnover Unit

A 6-pad 90" manual vacuum turnover unit handles stainless steel sheets up to 180 lb. It has a Powerpac mounted on a pad beam 9 ft long with three 2-ft 6-inch

adjustable cross arms to take material up to 14 ft long. The Vac-U-Lift pads are one-piece aluminum with nonmarking Neoprene snap-on seal rings.

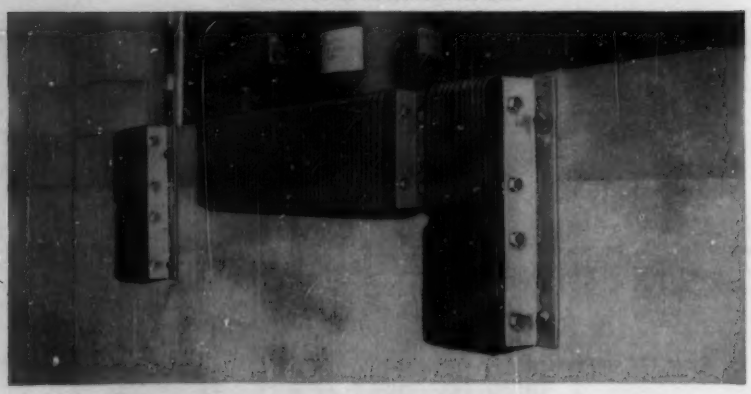
Vac-U-Lift Co.

Circle 126 on Reader Service Card

Aluminum Extension Ladders

Available in sizes ranging from 24 to 58 feet, this company's new series of 3-section extension ladders features safety and ease of operation. A specially engineered combination slide-guide and side-pulley mechanism (pictured) eliminates

Circle 28 on Reader Service Card



Timber Toothpicks or RESILIENT RUBBER . . . Which? -- No. 1 or No. 2

1 Dock timbers soon become splintered — require frequent replacement. Shocking to your docks — Costly to you!

2 Durable Resilient Rubber Dock Bumpers **are guaranteed for five years** — and impact tests prove 81% absorption.

Is it any wonder that economy minded industries and truck lines install Durable Dock Bumpers?

Why don't you?? — and insist on **guaranteed** Rubber Dock Bumpers by . . . . . .

DURABLE MAT COMPANY

75 N. Pleasant St., Norwalk, O. • 755 Kifer Rd., Santa Clara, Calif.

BARRETT SYSTEMS

Engineered to your job

TTR Sit-Down Rider fork hi-lift for all types of industrial use. Short turning radius. Cap. 1000, 1500, 2 000 lb.

HX Hand Pallet Truck, with advanced features. 2000-, 2500-, 3000-lb. cap.; other models in 4000- and 6000-lb. cap.

Hand and electric portable elevators to stack material "ceiling high"—save valuable floor space for productive operations.

PXG Palletex, lift truck with power up and power down. Cap. to 6000 lb.

WRITE FOR DESCRIPTIVE LITERATURE

Whatever your materials handling requirements may be, Barrett can do the job efficiently, economically.

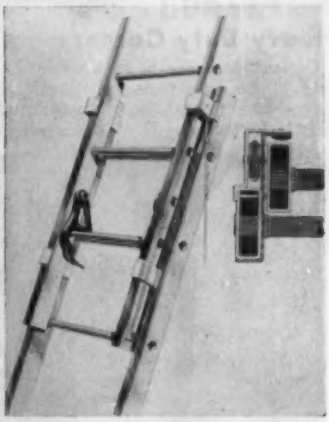
BARRETT

Materials handling engineers for half a century

BARRETT-CRAVENS COMPANY
642 Dundee Road, Northbrook, Illinois
Representatives in All Principal Cities

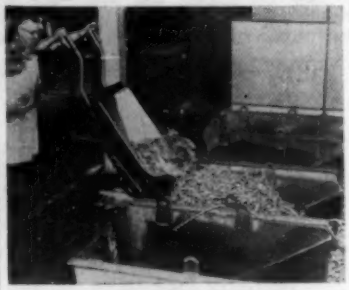
Circle 7 on Reader Service Card

WHAT'S NEW IN EQUIPMENT



jamming and binding, and provides fast, easy extension of the ladder from any ground position. Guides are equipped with fibre bushings to insure smooth operation. Also featured are safety stops which prevent over-extension, and box section

EQUIPMENT IN ACTION



THE SHOVELS were tossed out with the scrap after this firm placed Roura self-dumping hoppers in pits. Wheelbarrows need only be tilted to be emptied. Before, scrap was shoveled from wheelbarrows into hoppers on the floor. Greenlee Brothers & Co., machine tool makers, remove the hoppers from the pits with a shop-built hook on the forks of a truck. The hook fits into eyes welded to the hopper sides. After the hopper is raised, the truck forks take over and the hopper goes to the scrap bin for dumping.

Circle 127 on Reader Service Card

side rails and 4-point Tork-Lok rung-to-rung suspension. The rungs are hydraulically driven into side rails, and they expand internally to form an integral immovable joint, eliminating sidesway and racking.

Chesley-Sarnes Limited

Circle 128 on Reader Service Card

Scale Takes 30,000 Lb

A crane scale has capacities from 6,000 to 30,000 lb. It is accurate to 1/10 of 1 per cent. The scale is unaffected by shock

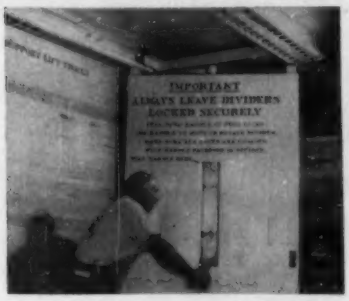
loads up to 25 percent over full capacity. It takes overloads up to four times capacity. There's a tare adjustment to 25 percent of full capacity. The dial is 16 inches in diameter. There is no wear of moving parts, no fatigue from continuous use, and no oiling required.

John Chatillon & Sons

Circle 129 on Reader Service Card

Door Divides Rail Car

Box cars, insulated cars and refrigerator cars may be divided by a smooth-surfaced door. It is positioned by a retractable



handle. The firm says it reduces damage to cargo, cuts loading time and costs, and permits load-sealed less-than-carload shipments. The divider locks at four points into hangers on the top and bottom of the car. The hangers roll on tracks the length of the car. There is no metal-to-metal contact with the car and thus no refrigeration efficiency loss.

Equipment Specialties Div., Union Asbestos & Rubber Co.

Circle 130 on Reader Service Card

(*Continued on page 22*)

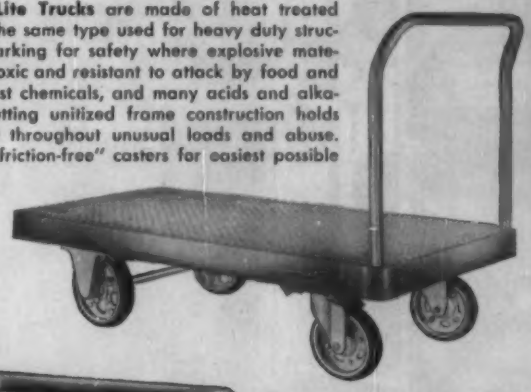
Built for rugged service...

2 NEW

lightweight floor trucks

Here are 2 new trucks that feature corrosion-free properties plus strength without weight . . . up to 40% lighter than steel. This permits use in almost any industry plus larger loads and more trips with less energy, less manpower.

Nutting Structo-Lite Trucks are made of heat treated aluminum alloy, the same type used for heavy duty structures . . . non-sparking for safety where explosive material is used, non-toxic and resistant to attack by food and unaffected by most chemicals, and many acids and alkalies. Exclusive Nutting unitized frame construction holds proper alignment throughout unusual loads and abuse. New 3 bearing "friction-free" casters for easiest possible maneuvering.



Nutting Fiberglass Box Trucks weigh as little as 70 lbs. (steel trucks of the same size, 120 lbs.!) Chrome impregnated fiberglass is impervious to steam, oil and mild acids and alkalies — won't crack or corrode — withstands temperatures from —40°F to 212°F, even up to 250°F for short exposures. Smooth inside with rounded corners for easy cleaning.

These light, but extra rugged trucks are designed to increase your handling efficiency and to save you money — based on lighter weight, longer life, reduced maintenance and less downtime. For full information send the coupon today.

Nutting TRUCK AND CASTER CO.
152 Division Street • Faribault, Minnesota

CASTER AND FLOOR TRUCK

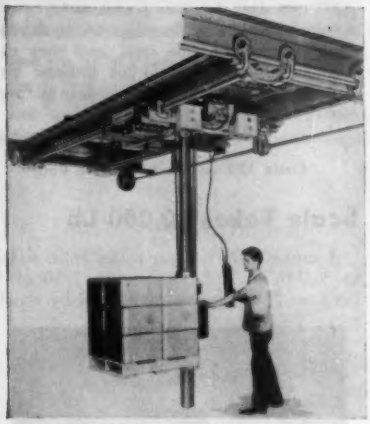
_____ Send Structo-Lite aluminum truck literature
_____ Send fiberglass truck literature

NAME _____
COMPANY NAME _____
ADDRESS _____
CITY _____ STATE _____

Circle 67 on Reader Service Card

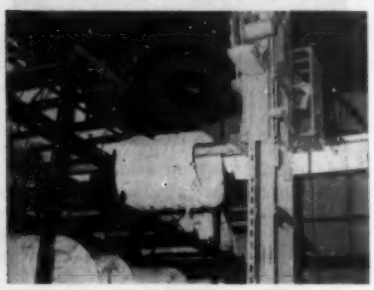
Circle 200 on Reader Service Card

PUSHBUTTON CONTROL makes it easy to rack a unitized load. Operator stands on platform which is fixed at the bottom of the column. He doesn't move up and down. The stacker crane is particularly useful in narrow aisles. It also is noted for efficient use of storage height.



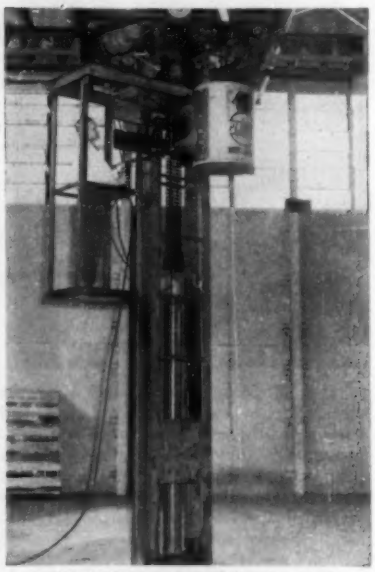
Circle 201 on Reader Service Card

ELECTRIC type stacker crane is operated from a pendant box control. Crane uses an electric hoist. Others work by a hydraulic system.



Circle 202 on Reader Service Card

RAM ATTACHMENT of 3,000-lb capacity moves 6 steel coils at a time from a truck to these racks. Note operator in cab (upper right).



Circle 203 on Reader Service Card

PLATFORM moves worker up and down for accurate load placing. You can replace forks with ram, platform, boom, or clamp (above).

Rack-Em Stacker Saves Space

COMBINE AN OVERHEAD crane and a fork lift truck and you have a stacker crane, one of the most versatile handling machines in use today. It works easily in tight areas, handling palletized or large bulk items with forks, platform, or boom.

Mounted as a top- or under-running crane, it has a rigid column that extends downward, supporting a lifting device. Some of the crane's characteristics:

Rotation. Some columns are stationary. Others have a turntable, which rotates them.

Columns. Some are rigid. Others telescope, adjust to clear various obstacles.

Riding. Some have cabs in which the worker rides up and down the mast. Others run from the floor, with pendant control.

Stacker cranes usually come in 2- and 3-ton capacities, although there are 6-ton models. Travel speed is 50 to 150 fpm. Main advantages: (1) ability to work in extra-narrow aisles, down to 4 ft, and (2) ability to use storage cube efficiently. Because greatest stability is at the top of the lift, heavy loads stack easily on high shelves.

HOW MANY HOURS MAKE A WAREHOUSE?

Unlike theoretical scientists contemplating the fourth dimension, materials handling engineers have a very practical concern with the element of time. In warehousing situations, for example, "how long" is a vital consideration, along with "where", "how much", and "when".

How long must goods remain at rest before they constitute a warehousing problem? An hour, a day, a week, a month? There is no universal answer. In modern and efficient handling systems, where warehousing operations are closely coordinated with other phases of the flow system, a true warehousing problem can result from materials being stopped or stored a few minutes as well as a matter of weeks. And, since such short-term stop-overs usually involve frequent rehandling, rapid turn-over can be a more costly problem than long-term storage would be.

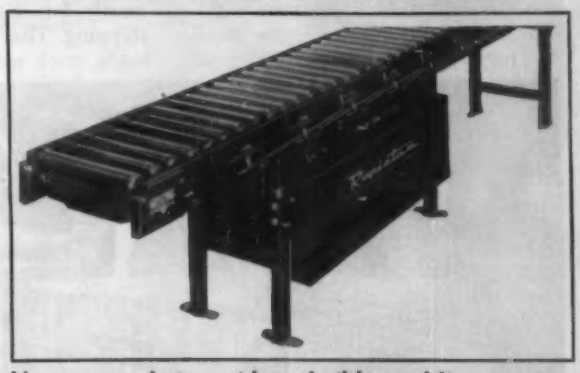
It's paradoxes like this that send materials handling managers to their nearest Rapistan engineer for practical ideas on solving their in-plant warehousing problems. Rapistan has evolved some interesting new concepts of long and short-term accumulation. And, Rapistan makes what it takes to put these storage problems "on wheels", where they're handled with the same efficiency you demand in the planned movement of goods over your flow system. The problems may be solved by a special-design Flow Rack for live storage, or something as familiar as a standardized type of wheel or roller conveyor, or a creative application of overhead trolley conveyor, or something as new as our APC "Pressure-sensing" conveyor.

RAPISTAN FLOW RACK SOLVES a localized warehousing problem in this plant. An optimum supply of all parts needed in this assembly area are held in live storage, easily accessible to the worker. As parts are removed from the Flow Rack, others flow forward to take their place.

Why not call in your Rapistan handling engineer and let him go "warehouse hunting" with you in your plant. He's trained to spot these "hidden" warehousing problems wherever they may occur in a plant's operations. And he's had worlds of experience in turning these problems into profits for all kinds of manufacturers as well as wholesalers and retailers. We'll show you some examples, in illustrated case studies. **Circle No. 10 on the Reader Service Card.**

DOZENS OF HANDLING PROBLEMS SOLVED by imaginative use of power and gravity conveyor and improved methods of storage, are illustrated in this newly-revised Handbook of Materials Handling Ideas. For your copy, **circle No. 11 on the Reader Service Card.**

ACCUMULATE CANS, DRUMS, SLATTED PALLETS WITHOUT LINE PRESSURE



Now accumulation without build-up of line pressure is possible for many materials that can not be handled on wheel conveyor. Rapistan APC Live Roller conveyor offers all the benefits of our revolutionary APC wheel conveyor, including low line pressures when accumulating under power, and automatic carton spacing. And, you can handle heavier and wider materials, as well as articles that only roller surfaces hand convey satisfactorily. For complete details, **circle No. 12 on the Reader Service Card.**

Rapistan®

CONVEYING EQUIPMENT

The RAPIDS-STANDARD CO., Inc.
723 Rapistan Building, Grand Rapids 2, Michigan

Circle 13 on Reader Service Card

Circle 204 on Reader Service Card

CUSTOM BUILT drop-side trucks serve as in-plant containers, speed production and reduce operator fatigue for plastics manufacturers. Trucks allow prepositioned parts to be moved between operations, eliminate rehandling at work station. They're made of long-lasting vulcanized fibre.

The Big Box—A Versatile Friend

Circle 206 on Reader Service Card

STAMPED METAL boxes are used mostly for in-plant rather than for shipping. They're strong, hold heavy loads, stack well, and last for years.

LARGE IN-PLANT containers can be custom made to suit your particular handling need for storage, production, shipping. They can save you space, shipping costs, time.

They're made of wood, stamped metal, wire, corrugated board, fibre board, fibre glass, or cloth. They can be collapsible, non-collapsible, and can have a drop bottom or a drop-side. They can have casters, special fixtures.

Wire type has a special advantage: you can see your product for inventory control.♦♦

Circle 205 on Reader Service Card

TOTE BOXES play a major role in the conversion of scrap into ingot. They take little space, can stack 4 high, cut production cost.

Circle 207 on Reader Service Card

WIRE MESH CONTAINERS are sturdy, have palletized base for easy handling. They can stack several high. Here they're used as a special container for machined parts. Many have dividers, drop fronts, very fine mesh.

Circle 208 on Reader Service Card

BIN holds 3,000 lb of precrushed gelatin. From filling area, it goes to processing unit. Lightweight, the bin is also used as a shipping container. Fork trucks can easily move them in plant movement. They can be tiered.

COMPLETES YOUR AUTOMATION SYSTEM

"DOCKBRIDGE"
LOADING RAMP

Automatically bridges the gap... between truck and dock with an easy grade

Engineered into one compact unit to meet the specific requirements of modern material handling systems... a truly automatic "DOCKBRIDGE" Loading Ramp.

Advanced engineering has finally achieved a truck-activated, hinged loading ramp that automatically adjusts to truck bed height without the use of costly hydraulics or jury rigged counterweights and counterbalances, or the need of a dock attendant at any time.

The American "DOCKBRIDGE" is modern in design. Only the "DOCKBRIDGE" is a complete package contained within its own frame. The framed unit can be fitted into a prepared pit in the dock — less than 18 inches deep. Or four sturdy legs can be attached to this frame, making it adaptable as a Free-Standing unit where a pit is not practical. "DOCKBRIDGE" installations are both low cost and easy for either existing facilities or new construction.*

The hinged loading ramp is built like a bridge and floats on a stout spring scissor mechanism, known as the "center-poise shock absorber". The cross-traffic legs offer a solid base between the ramp and frame when the unit is not in use. Its simple construction eliminates maintenance other than periodic oiling.

*"DOCKBRIDGE" Loading Ramps are available in 3 sizes: 6'x 6', 6'x 8', and 6'x 10'. Support legs for Free-Standing models are cut to size and are available at a slight additional cost.

EQUIPS DOCKS TO RECEIVE TRUCKS...

HIGH up 16 inches

LOW down 10 inches

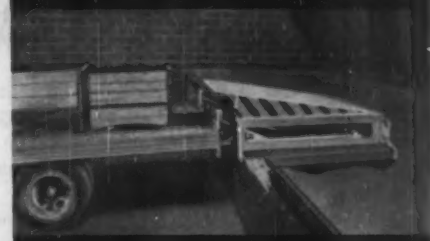
GET ALL THE FACTS
write for free catalog and specifications.

AMERICAN DOCKBRIDGE, INC.
239 W. OKLAHOMA AVE. • HUmboldt 3-3600 • MILWAUKEE 7, WIS.

Circle 2 on Reader Service Card

HERE'S HOW IT WORKS

1. Truck positions the ramp by backing against push arms of the rugged tubular elevator frame.



2. Elevator toggle is cycled, raising the ramp a full 16 inches above dock level as truck continues backing.

3. Hinged ramp then floats down on the center-poise shock absorber until the ramp's lip hugs truck bed.

4. After use, ramp returns automatically to a safe, positive cross-traffic position — no clutter, no lost space, good housekeeping.

Circle 209 on Reader Service Card

PALLETIZED cases of empty bottles are removed from trucks and rail cars. The loads then are fed into a lift for an automatic trip to the brewery's 2nd floor.

Circle 210 on Reader Service Card

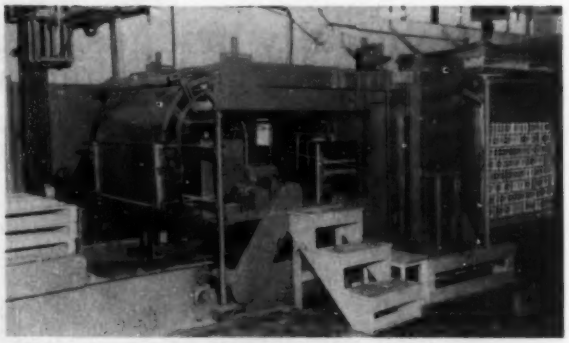
CONVEYORS move the pallet loads of empty bottles directly to the depalletizer. This machine lifts up the top layers of each load to free the bottom layer.

Beer in Units of 1 Ton

MANUAL HANDLING is kept to a minimum at Lone Star Brewery in Texas. Lift trucks, conveyors, and automatic machines do all the work from the time an empty bottle arrives at receiving until it leaves the plant in a case.

Lone Star did it by considering beer in tons instead of in cases. A consultant worked out an automatic system of run through: empties into the plant—filled bottles and cans out of the plant—a minimum of storage.

Cases at receiving are built into 1-ton unit loads on pallets 34" x 44". Fork trucks carry the units to lifts which take them to the second floor. Pallet loads move by powered conveyor to a depalletizer. Bottle cleaning and filling is automatic. Filled cases proceed by conveyor to palletizing machines where unit loads are removed by lift truck. They go either to storage or directly into trucks or boxcars.♦ ♦

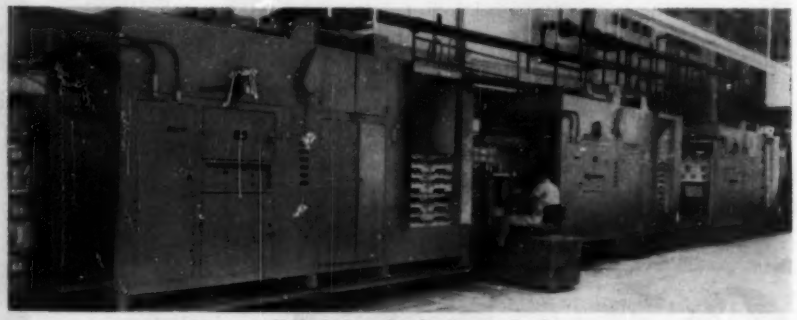


Circle 211 on Reader Service Card

BULK CANS from a can company arrive palletized in layers separated by chipboard. The depalletizer sweeps each layer of cans into a chute to the can filling line.

Circle 212 on Reader Service Card

LIFT TRUCK stacks two loads high in the warehouse. When possible, loads go directly to trailers, boxcars.



Circle 213 on Reader Service Card

PALLETIZERS are the heart of the system. Conveyors carry cases of filled bottles or cans to these automatic machines which stack the cases on pallets. Then the fork lift trucks take over, carrying loads to storage or to shipping.

Circle 43 on Reader Service Card

CUT HANDLING COSTS with HYTROL Conveyors

All-purpose Model "A" with aluminum bed, reversible, adjustable tension. 8 sizes, 6 to 20' length.

* RUGGED
* COMPACT
* VERSATILE
* JOB-ENGINEERED

- Horizontal and Inclined Models
- All-aluminum and All-steel Models
- Portable and Folding Models, Built-in Models
- Table-Top Models for Assembly Operations
- Powered, Reversible, Hydraulic Elevating
- Complete Optional Equipment and Attachments

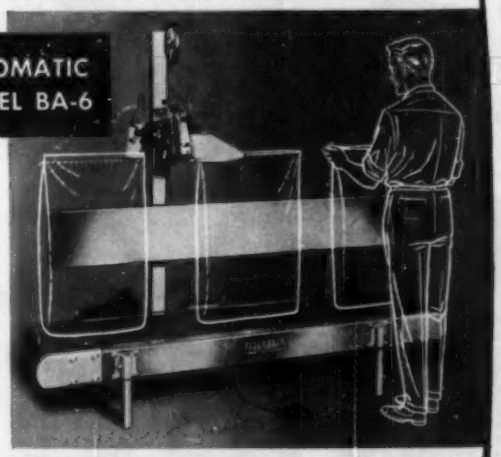
Let us help you choose the conveyor or conveying system that fits your needs. Engineering assistance at no obligation. Write for catalog.

HYTROL Conveyor Co.

1963 S. 54th STREET • MILWAUKEE 14, WIS.

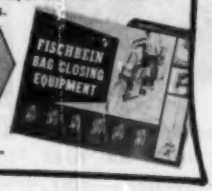
FISCHBEIN LOW COST EFFICIENT BAG CLOSERS

AUTOMATIC MODEL BA-6



Bags start the sewing operation when they reach the head. After sewing, thread is cut automatically and conveyor belt continues to move bag. Instantaneous start/stop controls.

WRITE FOR COMPLETE CATALOG FILE OF BAG CLOSING EQUIPMENT



DAVE FISCHBEIN CO., Dept. MH
2720 30th Ave. S., Minneapolis 6, Minn., U.S.A.

Circle 37 on Reader Service Card

Choose from 54 models of the "best workers" you will ever have in your shop!

E-Z LIFT

MODEL B-57

Complete with batteries and built-in charger—1500 lb. capacity—57" lifting ht.—manually propelled—power lift.

$297.

Power Propelled MODEL W-57

Complete with batteries and built-in charger—1500 lb. capacity—57" lifting ht.

$847.

Power Propelled MODEL WT-110

Complete with batteries and built-in charger—1500 lb. capacity—110" lifting ht.

$1397.

FREE—Send for complete catalog and price list describing all 54 standard models.

CROWN CONTROLS CO., INC.

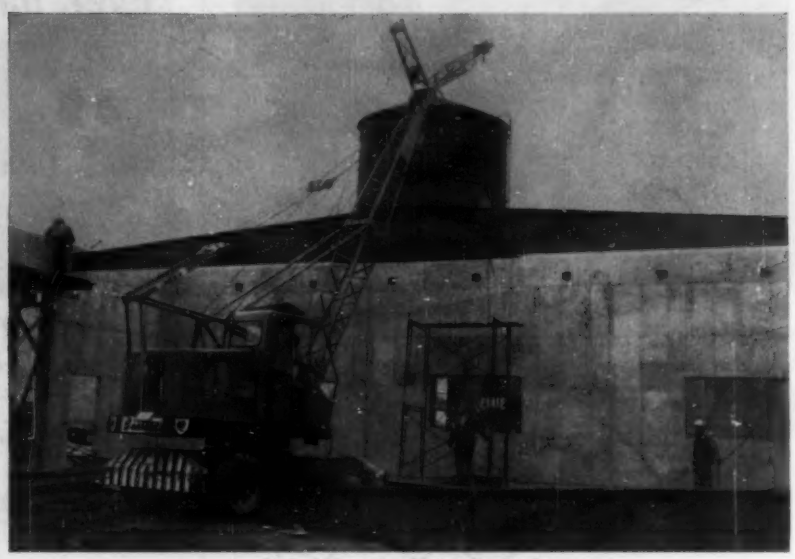
LUSTER AVENUE • NEW BREMEN, OHIO

Circle 25 on Reader Service Card

The Handy Yard Crane

Circle 214 on Reader Service Card

ONE OPERATOR controls lifting of pipe sections and travel of the machine after workers attach load.



Circle 215 on Reader Service Card

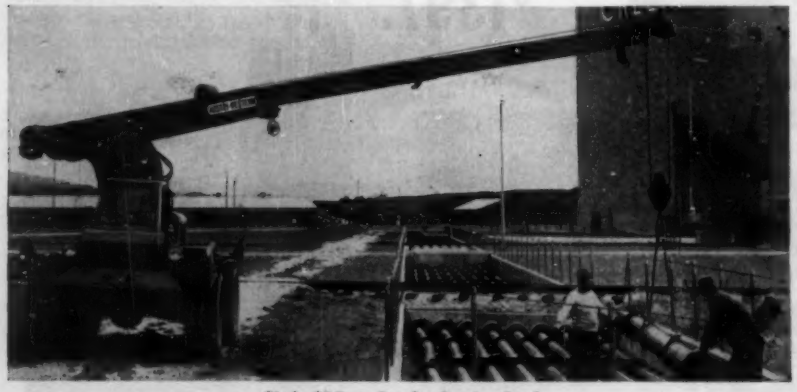
SELF-PROPELLED CRANE doubles as a construction tool. An 11-ton capacity is shown setting steel girders into place on a plant expansion job. It is equipped with a 25-foot boom and 10-foot jib; one man can operate.

Circle 216 on Reader Service Card

MAGNET ATTACHMENT is useful for loading metal scrap into truck. Crane travels at road speeds.

A MOBILE CRANE can handle more jobs in your yard than you might realize. List the kind of handling tasks you have to do, and look for typical crane applications:

1. Where you have to pick up loads over an obstruction.
2. Where you have to load gondola cars, trucks, and trailers in the yard.
3. Where you have to handle heavy, irregular shapes.
4. Where high stacking is practical in the yard, either on racks or by stacking pieces together.
5. Where you have to lift heavy machinery for maintenance.♦♦



Circle 217 on Reader Service Card

HYDRAULIC CRANE is a jack of all work, both indoors and outdoors. Here the hydraulically activated boom is shown reaching from the road into a storage area for pipe. Same crane does general maintenance work.

Circle 218 on Reader Service Card

MOBILE CRANE uses sling chain to lift load of castings. Dual drive wheels aid travel with heavy loads.

Circle 33 on Reader Service Card

For modern materials handling

ELECTROLIFT WORM-DRIVE HOISTS

Dependable, long-lasting ElectroLift hoists are used by the thousands in America's largest manufacturing plants. Features of these units—ranging from ¼- to 10-ton capacity—include:

- Worm-drive design for safe, sure braking action with minimum maintenance
- Use of quality components and materials for trouble-free performance
- Fully enclosed motor and gearing for clean, quiet operation
- Greater compactness for close headroom, safer action

For details on speed, models and operation, consult your classified directory for the ElectroLift representative nearest you.

ELECTROLIFT

204 Sargeant Avenue Clifton, N. J.

Model 2320

Adjustable to three strap widths

Strap Faster, More Efficiently...

USING ONLY ONE TOOL!

New A. J. Gerrard Stretcher-Sealer combines three strapping operations .... tensioning, sealing, scoring for easy fast break-off. Speeds up production, reduces operator fatigue, eliminates strap waste. For complete specifications, circle reader service card or write:

A.J. GERRARD & COMPANY / STRAPPING MATERIALS

418 East Touhy Avenue • Des Plaines, Illinois

Circle 20 on Reader Service Card

INGENUITY...*

ALWAYS A SPECIALTY

The last Aztec Emperor of Mexico, Montezuma II, utilized a human conveyor system to transport gold to his vaults. This vast wealth made possible such public works projects as temples, a conduit for Mexico's water supply, and a hospital for ex-soldiers.

Jorgensen CONVEYORS INC.

After a 30-year background in the manufacture of conveyor systems, Jorgensen is still proving that experience is no barrier to creativeness. This radically different metal flat-bed belt conveyor testifies to the fact that Jorgensen is not hamstrung by "traditional" engineering principles. Jorgensen designs and engineers conveyors and belts specifically for YOU—not for the mass market. **Write today for complete information.**

Overhead Conveyors • Floor Systems • Portable Units • Slat • Piano Hinge Apron • Dolly • Elevator • Apron • Chain-on-Edge • All Types of Automatic Material Conveying Equipment

JORGENSEN CONVEYORS, INC., 6208 N. 38th St., Dept. I, Milwaukee 9, Wis.

Circle 46 on Reader Service Card

WHAT'S NEW IN EQUIPMENT

(*Continued from Page* 13)

Little Truck Saves

Less than a penny takes 800 lbs of payload a mile. This is the claim for the 780 Truckster. Power by a 4-cycle, 7.95 hp

engine points to substantial savings on upkeep, maintenance etc. Truck is 48 inches wide; will operate inside the plant and on the street. Many major improvements and special body accessories are listed for 1960. A battery model is also available.

Cushman Motors

Circle 175 on Reader Service Card

Prefabbed Lumber Racks

Speedrack, a storage rack that comes in prefabricated form, affords savings in space and reduces damage loss in lumber

and building material warehousing. Materials may be stacked three and four tiers high; any tier may be loaded or unloaded without disturbing another. Upright trusses and load beams that lock into position are constructed from rolled steel and finished in baked enamel.

Storage Products Corporation

Circle 176 on Reader Service Card

Winch-Hoist For Tight Spots

A seven pound Lug-All Winch-Hoist rated at 1,000 lb operates smoothly whether rigged upside down, right side up or at an angle. It stores 15 ft of 133 strand airplane cable on a drum to make it handy for lowering, pulling, stretching, and bending jobs. Other models handle up to 4,000 lb. Frame is high strength aluminum alloy to protect drum flange and ratchet teeth against cement and other rough surfaces. Interlocking pawl system won't slip when oily or under water. Free release to let out slack cable works only under no-load condition.

The Lug-All Co.

Circle 177 on Reader Service Card

Caster Equipped Dumper For Angle Track Use

The Essex Hydro-Dumper 515 operates on in-plant or outside angle tracks. With a capacity of 3 tons or more, it can carry

bulk material to any desired location along the trackway, stop, and then dump the load. Skip sizes and shapes are made to customer requirements, depending on the material to be handled, and the relationship between dumper and the load drop. The skip pivots from its loading position, 135 degrees, to the dumping angle of 45 degrees.

Essex Conveyors, Inc.

Circle 178 on Reader Service Card

Mark Products by Hand

You can mark on any surface whether porous, nonporous, clean, dirty, smooth, rough, or oily with three large size markers just added to the Magic Marker line. No. 133 giant model shown here writes on virtually anything. It has a polyethylene squeeze bottle and a stainless steel ball-type head, it uses a heavy duty lacquer base opaque ink called Speedry D/O. Your choice of white, yellow, or black. Model No. 127 uses instant ball-valve action and writes on clean, smooth, nonporous surfaces. Its Speedry Type BB opaque ink is indelible, weatherproof, sun-resistant, and abrasion-proof. It's made with a non-clogging felt tip, has an aluminum body with pocket clip, and comes in eight colors.

Speedry Chemical Products, Inc.

Circle 179 on Reader Service Card

Rail Biting Chocks

Four styles of railroad wheel chocks, all equipped with tool steel spurs which bite into the rail, provide effective blocking of rolling stock. Instantly attached and removed without tools; designed to prevent derailment.

The Aldon Company

Circle 180 on Reader Service Card

EQUIPMENT IN ACTION

SPECTACULAR SAVINGS were realized at Miles Laboratories Inc. with a simple pallet and lift truck system. It used to take two men 3½ hours to unload a trailer truck. Now one man does the job in 30 minutes with Towmotor trucks. The goods are received on 40" x 42" x 60" pallets which also are used for handling case goods throughout the plant. In shipping, the lift trucks and pallets do in 2½ hours what used to require 35 hours. This means savings of $20 a truckload. The firm has reduced handling time in receiving, storage, and shipping departments by 70 percent.

Circle 181 on Reader Service Card

Circle 50 on Reader Service Card

Lewis UNITIZED ASSEMBLY CONTAINERS

FOR
- ASSEMBLY
- PRODUCTION
- STORAGE

Lewis Plastibox containers are one-piece molded plastic. They are smooth, strong, non-corrosive, easily cleaned. Colors, either green or yellow, are molded-in. Plastibox containers stack securely and afford maximum storage of small parts. Sizes available are 8½" long x 5" wide x 4½" deep, 6"x 3½"x 2½", 3"x 3½"x 1¾", and 3"x 3½"x 1¾" with a vertical divider.

MOUNTING RAILS— Rails are supplied in 18" and 36" lengths to mount 4 or 8 of the 3 smaller size Plastibox containers; 3 or 6 of the largest size. Rails afford a wide variety of bench or wall arrangements for any assembly or storage operation.

MOBILE TRUCK ASSEMBLY — These Lewis trucks handle all sizes of Plastibox containers and allow the boxes to be quickly and easily moved from one area to another. Trucks furnished with 36" mounting rails, two swivel and two rigid casters, and are finished in grey enamel.

WRITE TODAY
for complete information and brochure

G. B. Lewis COMPANY
708 Montgomery Street • Watertown, Wisconsin

Circle 53 on Reader Service Card

There's economy and efficiency in every move a Magliner Floor Truck makes! Magliners eliminate dead weight . . . increase output . . . cut handling costs! Made of magnesium —world's lightest structural metal—Magliners weigh as little as 40 lbs., are capacity rated to 2,000 lbs., *more* if required. Pound for pound, dollar for dollar, load for load . . . easy-going Magliners are your best buy!

Standard models available include platform trucks, shelf trucks, utility trucks, box trucks, etc.—a lightweight Magliner for every job! Tell us your requirements.

MagLiner

WRITE FOR FLOOR TRUCK BULLETIN
Magline Inc., P. O. Box 278, Pinconning, Mich.

MAGLINER MAGNESIUM FLOOR TRUCKS

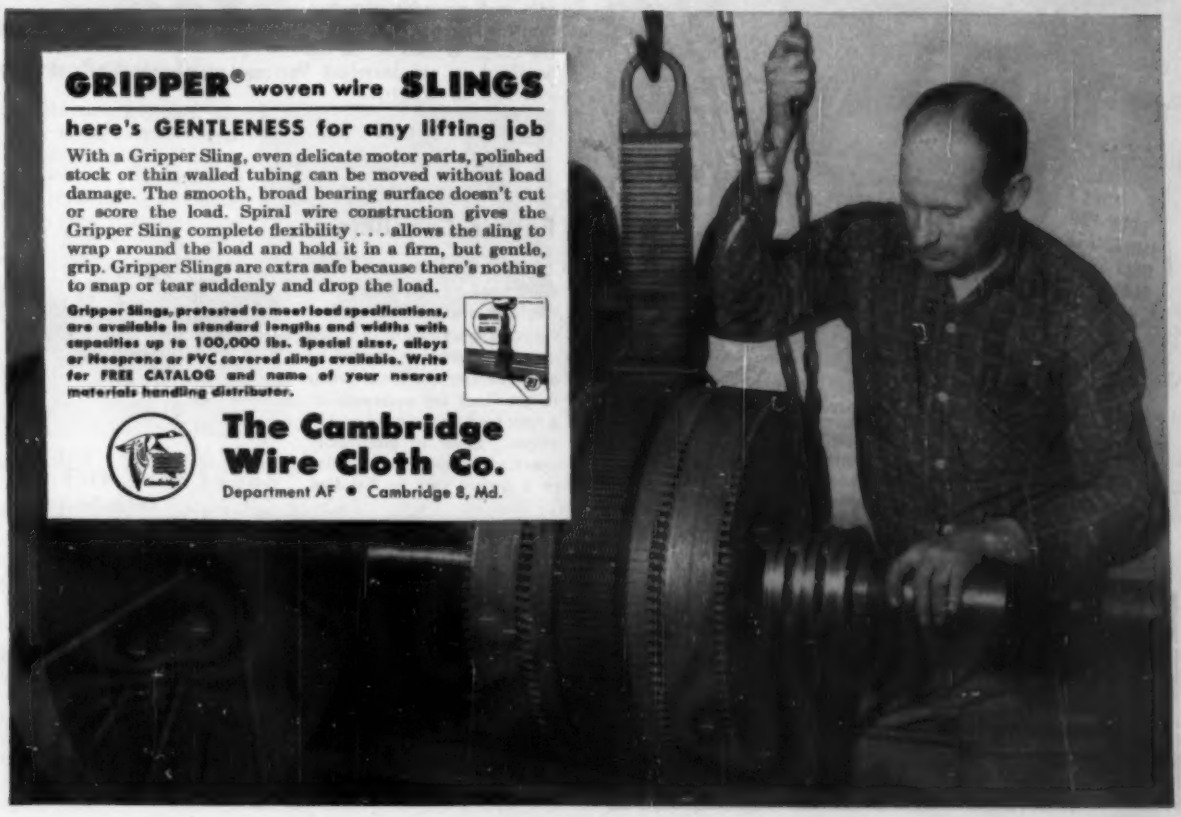
GRIPPER® woven wire SLINGS

here's GENTLENESS for any lifting job

With a Gripper Sling, even delicate motor parts, polished stock or thin walled tubing can be moved without load damage. The smooth, broad bearing surface doesn't cut or score the load. Spiral wire construction gives the Gripper Sling complete flexibility . . . allows the sling to wrap around the load and hold it in a firm, but gentle, grip. Gripper Slings are extra safe because there's nothing to snap or tear suddenly and drop the load.

Gripper Slings, pretested to meet load specifications, are available in standard lengths and widths with capacities up to 100,000 lbs. Special sizes, alloys or Neoprene or PVC covered slings available. Write for FREE CATALOG and name of your nearest materials handling distributor.

The Cambridge Wire Cloth Co.
Department AF • Cambridge 8, Md.



Circle 22 on Reader Service Card

Circle 54 on Reader Service Card

...it's a MAGLINER!

What's a Magliner got that workers want? Lighter lifting, easier handling, easier wheeling! Three big features that add up to *more loads moved at lower cost*. Facts prove it!

Tough too! Magliners are built to take rough usage under *any* conditions—on trucks, or loading docks, in the plant or warehouse. Are you using light, strong Magliner Magnesium Hand Trucks in *your* operation?

WRITE FOR BULLETIN HT-101.
MAGLINE INC., P. O. BOX 358
PINCONNING, MICHIGAN
Canadian Factory: Magline of Canada, Ltd. Renfrew, Ontario

MagLiner MAGNESIUM
HAND TRUCKS

Tops In Economy for Material Handling!

Costs only a fraction of rigid totes.
Here's double-utility value: for carrying parts and storage of inactive items. Will hold all the weight a man can carry. Double-walled corrugation construction provides exceptional stacking strength. Shipped flat and stored flat—take up minimum space. Find out for yourself how MIRACLE TOTES can benefit your plant and warehouse.

★ The PAIGE Company ★
95 MADISON AVE., NEW YORK 16, N. Y.

Send new Brochure on MIRACLE TOTE BOX MHI 860
INDIVIDUAL_____ TITLE_____
FIRM_____
ADDRESS_____
CITY_____ ZONE_____ STATE_____

Circle 68 on Reader Service Card

WHAT'S NEW IN EQUIPMENT

Moves Moist Coal

Long-stroke Navco air vibrator dislodges arched material with a direct, timed long piston stroke. Construction is one piece that is said to cut vibrator maintenance, down-time, and repairs. Spare part inventory isn't necessary, piston is the only moving part. There are no body bolts to shear or stretch. Units can be used in hazardous atmospheres; in extreme moisture; in freezing weather; where there is magnetic dust.

National Air Vibrator Co.

Circle 131 on Reader Service Card

No Pallets Or Banding For Tires

Tires are held securely in Yale's attachment for lift trucks. It will grip as many as eight 11:00 x 20, 12 ply tires in a hydraulic rotating, clamp arrangement. The rotating feature permits lifting a series of tires placed side by side horizontally or in a pile and reversing the position for storage. Capacity of the clamp is 1800 lb. It can be fitted to any standard Yale gas or electric lift truck with over 3000 lb capacity.

Yale & Towne Mfg. Co.

Circle 132 on Reader Service Card

Faster Labelling

Faster loading and faster dispensing of pressure-sensitive roll labels are advantages claimed by Grip-A-Tab dispensers. Problems created by adhesive transfer from labels to the liner are overcome by a new feed and rewind mechanism. Lever or electrically operated models are available electrically heated. Widths up to 3 inches can be handled.

Derby Sealers, Inc.

Circle 133 on Reader Service Card

Rack Stores Extra-Long Items

Easily assembled from standard components, rack solves the problem of storing long unwieldy stock off the plant floor. Penco Shelving comes two ways—angle-type, or T-line. Angle-type bolts together; T-line assembles with a quick-fastening channel clip. Skilled labor isn't required. Finish is durable gray or green baked enamel protected against rust and corrosion by a pre-paint process. Wide size range is usually in stock.

Penco Division, Alan Wood Steel Co.

Circle 134 on Reader Service Card

Save With New Trolley

A new 125-lb trolley has been added to American Cable-Way Conveyor line of 80, 160 and 250 lb trolleys. The new one makes savings possible on installations that might have required 160-lb trolleys. It can also substitute for 80-pounders on existing Cable-Way systems for more capacity. A zerk fitting mounted on the stud provides positive lubrication. These trolleys ride on inverted T-rail track. Trolley side-plates fit into grooves in the drive lugs and are bolted together. Drive lugs are factory-mounted on the cable while it is under working tension.

American MonoRail Co., Conveyor Div.

Circle 135 on Reader Service Card

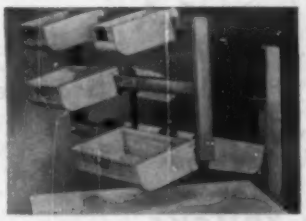
Bulk Material Weighed in Motion

Accurate weighing of material passing over conveyor belts is accomplished by the Integrator-Totalizer. The compact, pneumatically operated instrument automatically integrates (multiplies) belt travel with belt loading to produce direct readout of true weight of bulk dry materials. High accuracy and sensitivity, rapid and linear response, easy adjustment, and low air consumption (.1 scfm—steady state) are features.

B-I-F Industries

Circle 136 on Reader Service Card

Work Space Increaser



New rack gets parts containers off the assembly bench top and places them for better operator efficiency. All types of hanging containers can be hung from both sides of the rack. It pivots 360°; you can reload it from behind without interrupting operations. Individual containers lift off readily. Mountings fit all types of benches; height is adjustable.

Products For Industry, Inc.

Circle 137 on Reader Service Card

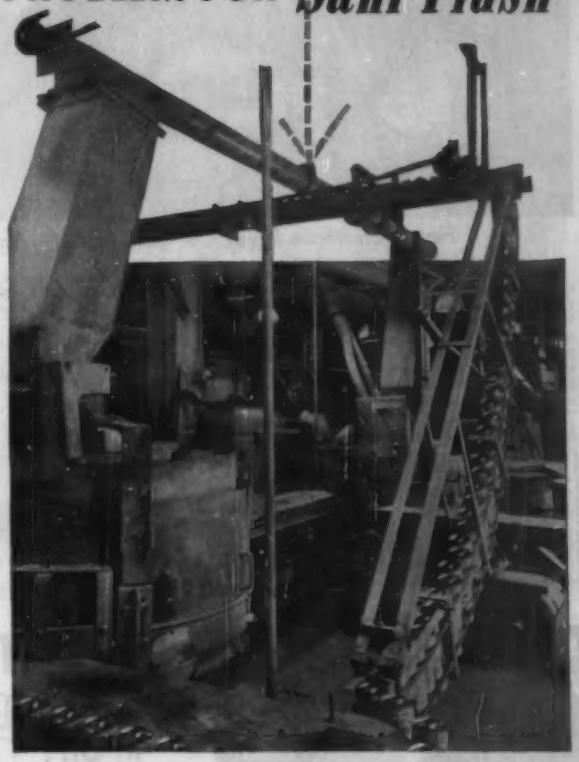
Tray Fits Your Shape

Custom made trays have cavities to fit individual products or assemblies. They're vacuum formed, production runs can be small or large. High cost of molds is avoided. Size—up to 15" deep x 36" x 22". Trays can be made from: linear polyethylene, cycolac, velour covered styrene, polyurethanes, expanded polystyrene and other plastic materials.

Patti Plastics

Circle 138 on Reader Service Card

CANTON *flo-tube* SOLVES MATERIAL HANDLING PROBLEM FOR *Sani-Flush*



SCREW CONVEYOR SAVES 88% ON CAPITAL INVESTMENT

Boyle-Midway, Inc. uses Flo-tube to move sodium bisulfate at will to an additional packaging machine for filling new 35 oz. economy-size Sani-Flush at an 88% saving in capital investment for proportioning and blending equipment.

Flo-tubes **move or feed** chemicals, coal, gravel, salt, sand, sawdust, sugar, woodchips and other bulk materials. They **maintain** predetermined delivery rates. They **save time** . . . up to 95% on general applications. They **save space**. Power source is optional. Flo-tubes exclusive Synchro-gear-drive motor is 98% **efficient**.

For complete information about Flo-tubes versatility in feeding bulk materials dependably, cleanly and economically . . . write today.

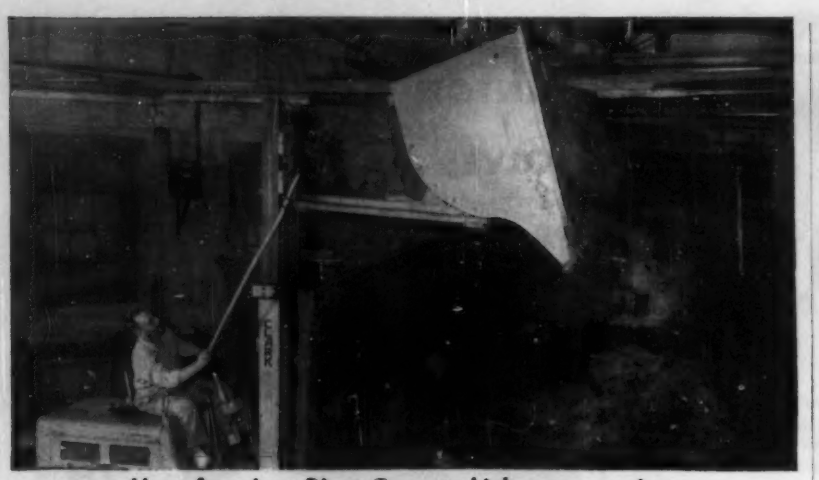
1907 50th 1957 CANTON STOKERS

CANTON STOKER CORPORATION

111 Andrew Place, S.W., Canton 1, Ohio

Circle 26 on Reader Service Card

Circle 73 on Reader Service Card



How American Rivet Co. gets higher scrap prices.

American Rivet Co., Chicago, replaced oil drums with 15 Roura Self-Dumping Hoppers for collecting metal scrap. These Hoppers, labeled to indicate the type of scrap they contain, are stationed in the machining areas. Chips and turnings, collected in tote pans, are emptied into the Hoppers. When full, a standard lift truck moves the Hoppers to the loading dock. The operator merely flips the latch and the Hopper automatically dumps its load into the dealer's truck, then rights itself, locks itself and is ready for another load. One man does the entire job. Scrap, segregated by type, brings higher prices. Handling costs are cut to the bone.

Perhaps Roura Self-Dumping Hoppers can cut costs and save time for you, too, in handling hot or cold, wet or dry bulk material. When there are problems of contamination or corrosion, stainless steel or stainless lined hoppers can be supplied.

ROURA Self-Dumping HOPPER

WANT MORE DETAILS? Attach this coupon to your letterhead and mail to
ROURA IRON WORKS, INC.
1408 Woodland Ave., Detroit, Michigan

SERVIS RECORDERS
Installed on 17 Lift Trucks

Clocks busy and idle time

SAVED $40,000 A YEAR

Everybody was Happy!

WORKERS no longer complained—they knew the Servis Recorder work record was right.

OTHER DEPTS. received lift trucks re-assigned due to new efficiency.

DEPT. HEAD received cash award for efficiency.

MANAGEMENT . . . well, $40,000 ain't hay! Management thinks Servis Recorders are wonderful—in fact bought 30 more. (Name of company on request.)

YOU can profit with Servis Recorders, too. Write for literature.

SERVICE RECORDER CO.
1015C Rockwell Ave. Cleveland 14, Ohio

Circle 74 on Reader Service Card

MR. DISTRIBUTOR:

Cash In On Those Spot Sales!

Stock And Display The Popular Line of DICO HAND TRUCKS and DRAIN STANDS

"E-Z ROCK" (one man loader) Barrel Drain Stand

MODEL 72RB

The Original "FLOAT-AWAY" Barrel Truck

Combination bag and warehouse truck (two trucks in one). Nose plate drops down for bags. Pays for itself—smooth surface won't tear bags.

WANTED!
Aggressive stocking distributors for the modern line of Dico Hand Trucks, Barrel-Handling Equipment and Industrial Wheels.

DICO 223 S.W. 16th STREET DES MOINES 5, IOWA

Circle 27 on Reader Service Card

WHAT'S NEW IN EQUIPMENT

Fork-Truck Features Step-less Inching

Working through a hydraulic circuit, carbon-pile control, the 2,500 lb capacity battery-powered EC-25 fork-truck offers

steady, stepless acceleration for inching operations, where loads must be placed delicately. A dual field, series wound, high-torque drive motor provides fast acceleration and efficiency throughout the entire speed range. Fully loaded the EC-25 will climb a ten percent grade; will travel up to 6.3 mph forward or reverse. Turning radius is 64 inches.

Clark Equipment Company

Circle 139 on Reader Service Card

Quick Change Live Storage Rack

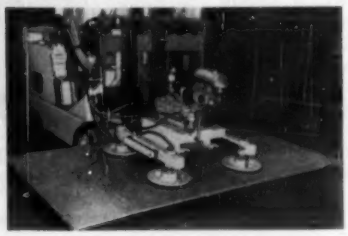
Live storage racks may be erected before exact carton size is established. Quick Change rail system permits changing width of lanes by moving rails to one side or the other. No fastening of any kind is necessary due to special hat section design. Space and time saving, first-in-first-out control, orderliness, and fewer order picking errors are the claims of the manufacturer.

Alvey-Ferguson Co.

Circle 140 on Reader Service Card

Lifts By Vacuum

A fork truck attachment uses vacuum



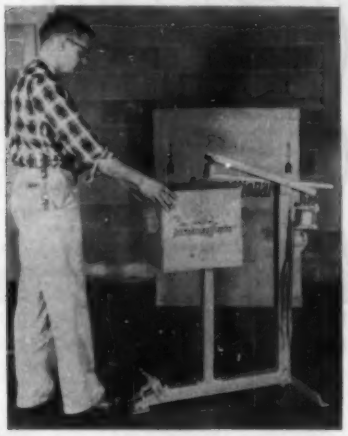
to handle barrels, plate, sheet, or stone. It has four 10-inch pads on a frame which slips onto the fork trucks. Lifting capacity of each pad is 500 lb, for a total of 2,000 lb. A gasoline engine drives the vacuum pump and has its own reserve vacuum system for safety in case of engine failure. The pads can be used individually, in combinations, or all at once. Other size pads are available: 8, 12, and 16 inches in diameter. The attachment goes on or comes off in less than 5 minutes.

Vac-U-Lift Co.

Circle 141 on Reader Service Card

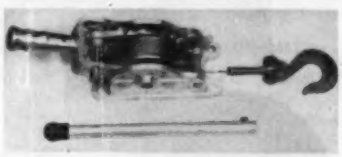
Box Bottom Stapler

Bottom Boxer staples carton bottoms before filling; is air-powered, foot-operated. Design frees both hands, speeds pro-



duction, lessens fatigue. Features: 200 staple easy-change magazine; choice of ½",

EQUIPMENT IN ACTION



1,000-lb Base Winch

A 1,000-lb-capacity Cadillac Base Winch is lightweight and withstands corrosion. It operates by pumping the handle. The drum takes up or pays out up to 40 ft of 5/32-inch or 20 ft of 3/16-inch galvanized aircraft cable. Handle to drum ratio is 8:1. You also can get stainless steel or Nylon cables. The winch weighs only 7½ lb. It features Tenzaloy castings, stainless steel shafts and springs, wearproof ratchet and pawl, and prelubricated porous bronze bearings.

Aluminum Products Inc.

Circle 142 on Reader Service Card

HOW AP PLATFORM TRUCKS RESIST WEAR EVEN ON HEAVY-DUTY APPLICATIONS

AP Pressed-Steel Construction No Warp...No Crack...No Splinter

AP Platform Trucks are extra-rigid, practically indestructible . . . designed and built of *pressed steel* to resist wear over a long, severe service life. They deliver a greater pay load every trip—whether used singly or as units of a motorized towing system.

AP trucks do not warp, crack or splinter —as wood-construction types so readily do even on easy duty. And AP offers light weight; smoothly rounded corners; end racks and bar handles that fit firmly into sockets; a modern appearance you can keep like new.

AP Platform Trucks are available in 3 series with capacities for every need: "L" (1,000 lb), "M" (1,800 lb) and "H" (2,750 lb). Prompt delivery from your AP-Franchised Distributor—your unified source of wheeled materials handling equipment. Call him—today!

TRAILER ATTACHMENTS

All Series "M" and "H" AP Platform Trucks are adaptable for either MANUAL (*top*) or AUTOMATIC (*bottom*) Trailer attachments for use with motorized towing systems. Units are factory-supplied and consist of either a manual or automatic hook assembly.

AP

THE AMERICAN PULLEY COMPANY

4200 WISSAHICKON AVENUE • PHILADELPHIA 29, PA.

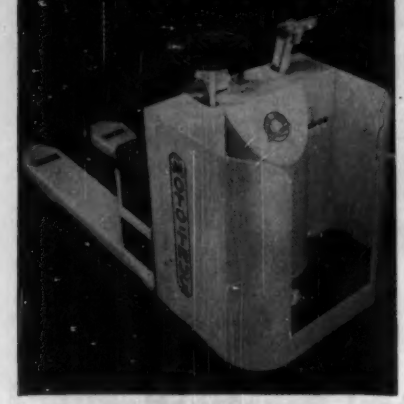
A division of VAN NORMAN INDUSTRIES INC.

2590

Circle 3 on Reader Service Card

MOTO-TRUC

Leads the field in **Pallet Trucks**



This small rider model is fast and maneuverable

■ If you need a truck that is almost as small as a "walkie" but fast and rugged like a rider model this MOTO-TRUC "Ride-A-Man" pallet truck is your answer. It's only slightly larger than MOTO-TRUC'S famous "walkie" pallet yet it provides a roomy operator compartment, wheel steering, foot brake and dead man control. Investigate the advantages of this MOTO-TRUC model for your pallet handling jobs.

Write For Moto-Truc Catalog — full specifications and dimensions

THE MOTO-TRUC COMPANY

1926 East 59th Street
Cleveland 3, Ohio

Circle 62 on Reader Service Card

WHAT'S NEW IN EQUIPMENT

5/8" and 3/4" staples; throat 36 inches deep, 14 inches wide.

International Staple and Machine Co.

Circle 143 on Reader Service Card

Lifting Tailgate Folds Out of Way

The Watson Weightlifter Hide-A-Gate lifting tailgate folds under a truck or trailer body to allow the truck to back

all the way against loading docks without damaging truck, dock, or tailgate. Ideal for city pickup and delivery. Capacity is 1,200 lb. A flip of the control lever positions the tailgate. It comes electric-hydraulic or PTO-hydraulic, mounts on 1½-ton and larger trucks or trailers.

H. S. Watson Co.

Circle 144 on Reader Service Card

Does Everything But Pack

Here's an integrated case handling unit that performs all casing chores except packing. The Standard-Knapp Integer,

when combined with various case loaders, selects a flat case from the magazine, opens, squares, and positions it on the packer, and, after packing, glues and seals the container. Takes any kind of cases.

Emhart Mfg. Co.

Circle 145 on Reader Service Card

Fiber-and-Plastic Drums Cut Weight

Polyethylene-lined fiber drums are designed to cut freight and handling costs by cutting the weight of the container.

Circle 66 on Reader Service Card

New London PARTS CONVEYOR

A PRODUCTION PARTNER IN ANY PLANT

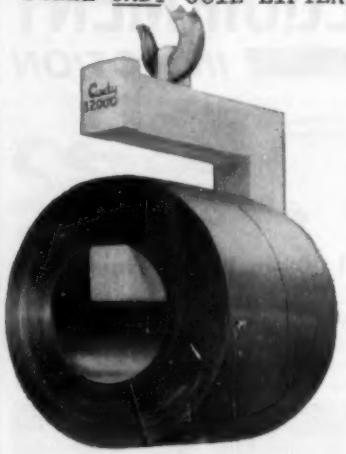
Husky, electric motor drive. 4" to 24" Neoprene cleated belts or wire mesh belts for horizontal or incline operation. Easily handles parts and some bulk materials. Adjustable, detachable undercarriage.

Write for complete information on our entire line of low cost, quality conveyors . . . or name of nearest representative.

NEW LONDON ENGINEERING CO.

PHONE 1000 DEPT. MHI
NEW LONDON • WISCONSIN

HEAVY LOADS HANDLED SAFELY ECONOMICALLY BY RIGID LIGHT WEIGHT ALLOY STEEL CADY COIL LIFTER



Send for Catalog showing standard sizes, special sizes available.

CADY METAL FABRICATING INC.
JAckson 4145
85 Schenck St., N. Tonawanda, N.Y.

Circle 21 on Reader Service Card

They're good for anhydrous, caustic, and similar bulk chemicals. A full-open head makes them easy to fill and empty. The

polyethylene lining is coated onto aluminum foil, which is laminated to the inside of the fiber drum. That, plus a liquid-tight bottom, guarantee complete moisture-vapor protection. You can stack these drums without damage.

The Continental Can Co.

Circle 146 on Reader Service Card

Baler Bag Packer Emphasizes Speed

Do you package bulk products in baler bags? The 254-B baler inserts filled multiple packages of such products as flour,

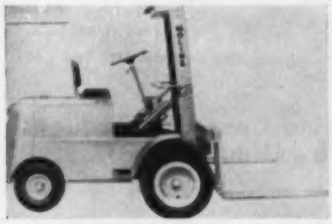
sugar, dog food, peat, and specially fertilizers into baler bags or semi-rigid containers. Equipped with automatic feeder and baler bag applicator, it can automatically bale up to 18 charges a minute, depending on the number and size of the units making up a charge.

St. Regis Paper Co.

Circle 147 on Reader Service Card

Fork Truck Makes Debut

Moline joins the material handling field offering fork lift trucks and tow tractors with torque converters and a new



power-shifted transmission. Trucks are rated to 10,000 lbs with lifts to 20 feet, tractors to 10,000 lbs draw-bar pull. Engines meet U.S. standards. Navy has awarded $3.25 million to new division.

Minneapolis-Moline Co.

Circle 148 on Reader Service Card

Circle 24 on Reader Service Card

lite-line Mobile Yard Ramps

DOCK BOARDS

PALLET DOLLIES

The dock that goes to the job will cut your loading costs

A Lite-Line Yard Ramp moves easily into position, to load or unload truck or rail car.

SAFE • RUGGED • LIGHTWEIGHT

For complete information write to

lite-line MAGNESIUM DOCK EQUIPMENT

LITE-LINE METAL INDUSTRIES
DIVISION OF
COPPERLOY CORP.
Cleveland 35, O.

NOW

...The Easiest One-Man Drum Moving Ever!

MORSE Model 55-0 DRUM CRADLE TRUCK

Low-cost and versatile, this cradle truck carries . . . rotates, manually . . . dispenses. Has side opening for drums with side drain cocks. Long wheelbase and retractible caster frame give exceptional stability under load. For 55 and 110 gal. drums. Circle this product for literature and prices.

MORSE Model 150-R DRUM HAND TRUCK

One man can pick up a 1,000 lb. load . . . and balance it with one finger. Model 150-R features rubber tired wheels with ball bearings for quiet, easy rolling. Permits precise positioning of loaded drums. For drums 24" to 45" high and with diameters from 15". Sturdy steel construction. Circle this product for literature and prices.

Clip this ad to your letterhead

MORSE MANUFACTURING CO., INC.
739 West Manlius Street, East Syracuse, N.Y.

Circle 61 on Reader Service Card

...Quietly

. . . without leaving so much as a wheel print on your fine floors. DUROTHANE protects like rubber but wears like steel . . . moves so easily that power consumption is reduced by 30-35 percent.

AVAILABLE NOW IN:
CASTER WHEELS—LIFT TRUCK WHEELS
PALLET TRUCK WHEELS.

Ask DIVINE for full information. Better yet, first ask a DIVINE user. Then you'll be sure to ask us.

DIVINE BROTHERS CO.
200 SEWARD AVENUE
UTICA 4, NEW YORK

Circle 30 on Reader Service Card

Circle 15 on Reader Service Card

Built for the job

Bond®

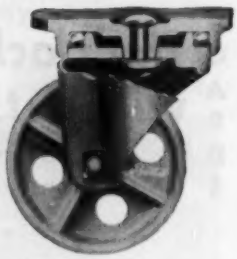
TRUCK CASTERS

...pack more for less!

Burro handling is sure but painfully slow. So for *your* material handling use Bond built-for-the-job casters ... they'll "pack" more for less, fast and sure.

See your nearby distributor—he has the *right* Bond Casters for your jobs.

BOND FOUNDRY & MACHINE COMPANY
324 Penn Street, Manheim, PENNSYLVANIA



Bond 3-A Series Single Ball Race Swivel Caster—semi-steel construction for strength and durability. Also Double Ball Race and Rigid semi-steel casters available.

Bond 50-A Series Single Ball Race Pressed Steel Caster—lightweight, smooth rolling, built for economy. Also available in Rigid and Double Ball Race Pressed Steel types.

Move Material ECONOMICALLY!

—MAGNESIUM DOCK BOARDS prove their superiority ... outperform, outlast others!

—LADD DRUM LIFTER makes it practical to handle metal drums with a fork truck!

Also Yard Ramps, Light-Weight Dollies, Pallet Dollies. Special Equipment. Sales Territories Available

MODERN LIGHT METALS, INC.
Coloma, Michigan Phone HOward 8-5041

Circle 52 on Reader Service Card

HIGH-LEVEL
CONTROLLED POURING
MORSE
kontrol-karrier
Model 185

Now Available!

A remote control unit that eliminates labor hazards and prevents spillage. Just hook to monorail hoist, crane or chain block. Man on floor is in complete control of drum at all times by use of chain drop. Kontrol-Karrier will handle 800 lbs. liquid or 500 lbs. dry with safety and ease. 12 foot chain standard. Longer lengths optional.

Clip this ad to your letterhead.

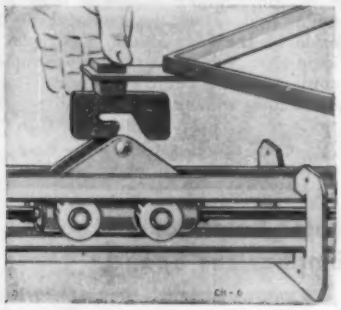
MORSE MANUFACTURING CO., INC.
759 West Manlius Street, East Syracuse, N. Y.

Circle 60 on Reader Service Card

WHAT'S NEW IN EQUIPMENT

Conveyor Handles Heavy Loads

Gross weights of 1,000 lbs or more can be towed by "Chainless" conveyors installed in-the-floor, on-the-floor, or over-



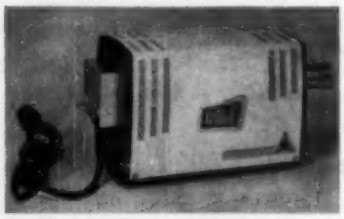
head. A tow-bar attached to the front axle of a standard or specially built floor truck is manually engaged in the trolley attachment. Smooth-surfaced floor installations are covered by metal floor plates. The tow-bar travels in a narrow slot, there are no tracks.

The American MonoRail Co.

Circle 149 on Reader Service Card

Closed Circuit TV Camera

Closed circuit TV camera Model 70-A features a transistorized video amplifier. This eliminates microphonics and pro-



vides 600-line resolution. The camera adjusts at once to variations in light.

Dage Television Division
Thompson Ramo Wooldridge Inc.

Circle 150 on Reader Service Card

Mine Conveyor Reduces Downtime

An underground coal and hard-rock mine conveyor that can operate for up to a week without relocation bids to keep pace with continuous mining machinery. Downtime is reduced; 400 tons per hour for 70 hours or more is possible. A conveyor 1,000 feet long, straight or curved is feasible. Principle of the unit is a belt riding on rollers supported by sled-like skids spaced at 5-foot intervals. The belt

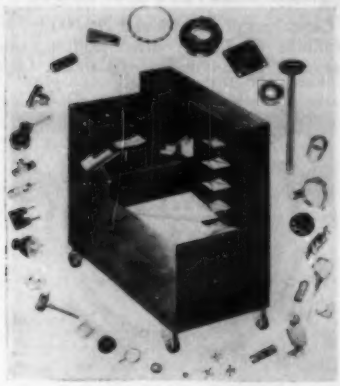
is fed from the mine loader. Electro-hydraulic tractors at each end exert tension to keep the belt taut; also tow conveyor to new areas.

Hewitt-Robins, Inc.

Circle 151 on Reader Service Card

Counts Difficult Parts Fast

Fully transistorized, the Model 605 accurately counts parts at high speeds. Flexibility allows handling of virtually any



shape or material; those packaged by weight may now be counted accurately. Parts may be batch loaded directly into a hopper or fed by a conveyor. Change-over to a different item is said to be less than a minute. Part sizes can range from 1/8 inch to 4 inches; weight limits from 1/20 oz to one lb per part. Speeds up to 20 per second are possible for small pieces. Unit size: 30" x 42" x 55".

Atronic Products, Inc.

Circle 152 on Reader Service Card

Rear-End Coder

Compact Series 210 Rolacoder conveyor and case-sealer attachment automatically places a code imprint on the rear

surface of cartons and shipping cases as they move along the line. Coding head moves out of housing as case moves by, rolls imprint, then retracts. Will imprint any size container from 3 inches high.

Adolph Gottscho, Inc.

Circle 153 on Reader Service Card

Safer Hoist Hooks

Convert standard hoist hooks to safety hooks in minutes using only hand tools.

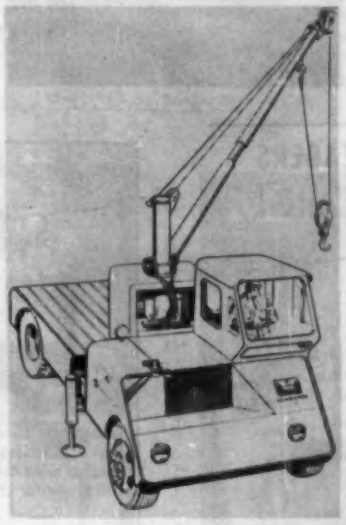
Clamp-on collar and spring-loaded safety latch are only major parts. Collar conforms readily to hook shank. Lugs on both sides of latch permit operation without need for putting fingers into hook opening. Stock sizes from 1/4 ton through 10 tons; larger on special order.

The Harrington Company

Circle 154 on Reader Service Card

Convertible Prime Mover

The Ottawa Commando combines a prime mover and a line of contracting and material handling equipment. Prime



mover has split torque transmission that permits full power hydraulic creep, direct, or torque converter drive. Full power speeds go from 0 mph to 35 mph. Uni-Tools, a dozen of them used singly or combined, mount on prime mover. They include: the Hydra-Hammer, a breaker-tamper-pile driver of versatility; a self-propelled backhoe with a 7,000 lb bite; a 7,000 lb power crane.

Ottawa Steel Division, Young Spring & Wire Corp.

Circle 155 on Reader Service Card

V-Grooved Casters

Manufacturer is making V-Grooved wheel casters for use on inverted angle iron track. Purpose: production line and

FOR MATERIALS ON THE MOVE

Universal

BUCKET ELEVATORS & BELT CONVEYORS

ARE ENGINEERED TO MEET YOUR NEEDS

Universal Bucket Elevators are designed as compact units, that will elevate your materials smoothly and surely. Standard steel, galvanized or stainless elevators can be supplied in complete "packaged" units . . . ready to install and put to work.

THROUGH RESEARCH AND MODERN PRODUCTION METHODS UNIVERSAL OFFERS YOU . . .

ADVANCED DESIGN — More compact, cleaner operating, smoother running.

GREATER ECONOMY — Low initial cost, low operating cost, minimum maintenance and repair.

EASIER INSTALLATION — Jig assembly at the factory assures precision-fitted components.

QUICK DELIVERY — Production line methods and rigid quality control assures fast delivery. Parts are kept in stock to avoid costly shutdowns.

Universal Bucket Elevators are available for capacities up to 3750 cubic feet per hour and may be obtained for any exact height.

UNIVERSAL "TROF-BELT" CONVEYORS

. . . offer a low cost efficient method of moving all free flowing materials. Low initial cost, less maintenance and trouble-free service are made possible because of the smooth rollerless design.
There's a Universal "TROF-BELT" conveyor designed to meet your specific needs in capacities up to 3,750 feet per hour.

GUARANTEE

Universal guarantees complete satisfaction within 60 days or full purchase price will be refunded. Materials and workmanship guaranteed for one year.

Send For Free Literature and Prices

Universal HOIST CO.

Box 133 Cedar Falls, Iowa

Circle 82 on Reader Service Card

WHAT'S NEW IN EQUIPMENT

blind alley operations, such as ovens and retorts. In addition, these casters are recommended for conventional on-the-floor

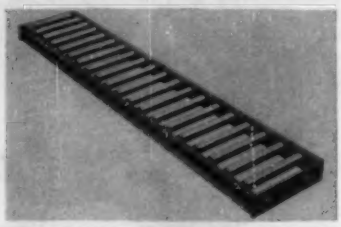
use when floors are extremely uneven, pitted or debris-cluttered. Made in matching swivel and rigid types (750 lb capacity) of 30,000 psi cast semi-steel with 6 x 2 inch wheels.

Nutting Truck and Caster Co.

Circle 156 on Reader Service Card

Rollers Won't Corrode

Galva-Finish, protection against corrosion, is a standard feature of manufacturer's line of conveying equipment at no



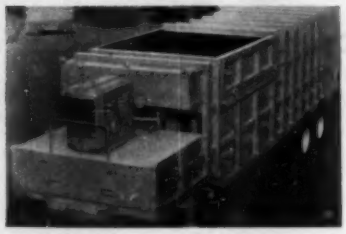
extra cost. It is a special finish utilizing zinc compounds and epoxy resins for rust resistance efficient at sheared and rolled edges, welded joints and punched holes.

E. W. Buschman Company

Circle 157 on Reader Service Card

Trailer Compacts Waste

210 cu yards of industrial waste shrink



to small volume under 65,000 lb thrust of single cylinder in the DB Hydraulic Compaction Trailer. Head moves full length of body (300") for tight packing, clean discharge. Standard fifth wheel or tandem tractor handles trailer. Sump (18 gal) gathers liquids. Made in 2 sizes.

Dempster Brothers

Circle 158 on Reader Service Card

Ultra Capacity Dynamometers Portable

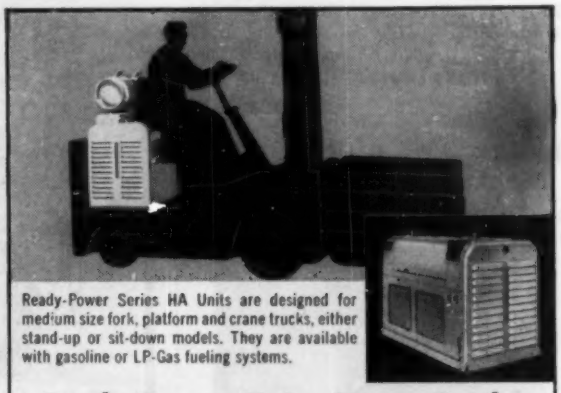
Capacities of 150,000 and 200,000 lbs are available in Dillon direct-reading, traction-type dynamometers (portable force-

measuring instruments). Both units have a net weight of 23 lb, independent of accessories; have highly visible 10 inch diameter dials. Other features include: full-scale reading with only .040 inch deflection of beam; beam made of special alloy

DON'T FORGET

CIRCLE 51 ON READERS SERVICE CARD!

Circle 51 on Reader Service Card



Ready-Power Series HA Units are designed for medium size fork, platform and crane trucks, either stand-up or sit-down models. They are available with gasoline or LP-Gas fueling systems.

Ready-Power Units Power Trucks At Lowest Cost Per Ton-Mile

ASSURE FULL-TIME POWER FOR YOUR ELECTRIC TRUCK

It costs less to move materials when your electric truck is equipped with Ready-Power. The compact Ready-Power Unit consists of a dependable industrial engine and DC generator combination. It generates full capacity power whenever needed, eliminating power lag, truck slowdown and recharging of stored power. It is installed or interchanged on practically any make of truck. Write for Bulletin 99A for details on all models.

READY-POWER

The READY-POWER Co., 3844 GRAND RIVER AVE., DETROIT 8, MICH.

Manufacturers of Gas and Diesel Engine-Driven Generators and Air Conditioning Units; Gas and Diesel-Electric Power Units for Industrial Trucks

Circle 72 on Reader Service Card

and fatigue tested; individually calibrated to 2 per cent plus or minus full range. Thirteen other models are available in capacities from 0-500 lb to measure torque, traction, tension, compression, or weight.

W. C. Dillon & Co.

Circle 159 on Reader Service Card

Can Ride Small Tractor

An electric tractor can be used as a walkie or for standup rider. It is only 46-plus inches long and has a short turning radius. There are two speeds forward and two speeds reverse. Powered by a 12-volt battery, it has ultimate drawbar pull of 550 pounds and rolling capacity of 10,000 pounds. The spring-loaded steering handle applies a brake.

Barrett-Cravens Co.

Circle 160 on Reader Service Card

Live Roll Belt Adjusts Self

Unibuilt live roll conveyor has carrying rolls mounted to provide automatic tension adjustment for the belt. End-drive, end take-up or center-drive, center take-up models are available. Various roll spacings and widths are offered.

Conveyor Specialty Co., Inc.

Circle 161 on Reader Service Card

Slug Processing Speeded

Any desired feed rate can be had with Model 3000 variable-speed parts feeder. Automatic bank controls maintain a steady

flow of round steel slugs ranging from 1 to 3½ inch diameter and 2 to 6 inches long. Feed track shuts off when full; resumes operation automatically on demand.

Feedall, Inc.

Circle 162 on Reader Service Card

Circle 31 on Reader Service Card

The Man Who Knows Casters Best Knows...

Until the new, complete DIVINE CATALOG is ready, a copy of its condensation, "THE BEST OF DIVINE" is yours for the asking. Simply clip this advertisement to your letterhead and mail to:

DIVINE BROTHERS CO.
200 SEWARD AVENUE
UTICA 4, N. Y.

NEW STURDI-BILT PALLET RACKER

Converts standard pallets into **LOWEST-COST** portable racks

- **Provides most rigid racking ever offered**
- **Takes heavier loads.**
- **Stacks ceiling-high**
- **Assembles faster**

This new STURDI-BILT hardware enables you to safely palletize **anything** . . . regardless of size, shape or weight. Sturdy? Handles up to 12,000 lbs. per stack . . . with no twist or sway. So versatile, too. Amazingly low in cost!

For FREE data, attach the coupon to your letterhead.

Sturdi-Bilt

Material Handling Div. (MHI-80)
Union Asbestos & Rubber Co.
332 S. Michigan, Chicago 4, Ill.

☐ Without cost or obligation, please send me full details on the new STURDI-BILT Pallet Racker.

Circle 76 on Reader Service Card

Down goes a Magliner, down go costs! . . . and they *stay down* with Magliner Magnesium Dock Boards on the job! Magnesium light for *one man handling* . . . magnesium strong for rugged service . . . Magline-designed to keep loads in motion . . . safely, smoothly, *economically!* Send today for your copy of "Difficult Dock Problems"—the bulletin that helps you *spot and correct* high-cost dock loading problems.

Request Bulletin DB-204. Magline Inc. P. O. Box 108 Pinconning, Mich.

MAGLINER
MAGNESIUM DOCK BOARDS

Circle 55 on Reader Service Card

Circle 42 on Reader Service Card

RACK UP BIG SAVINGS . . .
Build your materials storage racks with

NU-RAIL

SLIP-ON FITTINGS *and Std. I.P.S. Pipe*

Pallet Racks

Sheet Racks

Bins

No Threading! No Welding!

NU-RAIL high-tensile aluminum fittings *slip on* the pipe, and the unique offset design permits as many as three pipes to pass each other without cutting.

Any man in your maintenance or warehouse departments can build sturdy racks with only a hex key and a hacksaw, using new or used pipe in standard I.P.S. pipe sizes. Completely flexible . . . adjust to meet changing requirements. 100% pipe salvage.

The Hollaender Manufacturing Company
Dept. M-36, 3841 Spring Grove, Cincinnati 23, Ohio

BASSICK SEALS IN CLEANLINESS . . . LOW MAINTENANCE

Specially engineered lubrication seals end the hazards of dripping grease . . . are effective for life . . . can be easily flushed and new grease added without disassembly. Keeps floors clean, saves time and money. Four page brochure gives all the facts. O.29

Heavy duty for punishing service on power pulled trucks, assembly line dollies and fixtures. For loads up to 1,500 pounds.

Medium duty features heavy gauge steel construction, large diameter ball race for quiet, fast, easy swiveling. For loads up to 750 pounds.

THE BASSICK COMPANY
BRIDGEPORT 5, CONN.
IN CANADA:
BELLEVILLE, ONT.

Symbol of SW Excellence — Bassick — A DIVISION OF STEWART-WARNER CORPORATION

Circle 6 on Reader Service Card

WHAT'S NEW IN EQUIPMENT

Hoist Defies Weather

Compact Thern spurgeared hand hoist comes in 8 capacities from ½ to 10 tons. Parts are totally enclosed in strong aluminum housing for light weight, and sealed to shut out dirt and weather. 3-ton size weighs only 70½ lb with 10 ft of lift chain. It can be carried and placed by one man. Noiseless load brake eases lowering, reduces wear because there is no ratchet. Hand chain specially formed and plated to be gentle on hands. It won't bind regardless of pulling angle, and won't rust.

Thern Machine Co.

Circle 163 on Reader Service Card

No Need To Space

A Flow Control Register to count cartons, cases and boxes on a conveyor system combines mechanics and an electric circuit. Accurate counts are obtained without having to space objects on the line. Each item partially depresses trigger fingers which open a circuit. As the rear edge of the item passes the roller, a coil charges the counter. By this time the triggers are in normal position, resetting for the next count. Each Flow Control Register comes with a short belt power feeder which determines speed of the items. A variety of control and counting accessories are available.

The Rapids-Standard Co.

Circle 164 on Reader Service Card

Portable Elevator Redesigned

Manufacturer has completely redesigned Safeway portable elevating trucks. Manual and battery-powered models have minimum number of exposed welds for better appearance and operation. Top corners of outrigger forks have been rounded to avoid jamming against skids. Carriage rollers have lifetime-lubricated sealed roller bearings for minimum maintenance. Other improvements to reduce maintenance are: precision assembly of carriage rollers and mast channels—they ride together easily; accessible lift cylinder mounting; rigid lift-chain cross-head—this stops

rocking due to off-center loads. Pumps on battery-powered models are all tested under pressure to assure leak-proof operation.

American Pulley Co.

Circle 165 on Reader Service Card

Unit Crane Improved

Improved Model 357 self-propelled crane handles safety-rated 15 tons; converts quickly to ⅝ yd clamshell or dragline. Entire carrier is matched to crane upper works for stability and full circle, fast cycle operation. One engine powers it, one man controls it. Costly dismantling is not necessary. Split drum construction allows shafts and bearings to remain in place.

Unit Crane & Shovel Corp.

Circle 166 on Reader Service Card

Truck And Scale Combined

A scale as an inegral part of a hydraulic foot-lift truck weighs and moves loads simultaneously. Lewis-Shepard builds the truck with special lifting angles to hold the scale. Each truck must be adapted to suit the design and capacity of the scale used. Combining operations is said to eliminate multiple handling of loads. Time need not be spent in handling the material on the truck then moving it to a scale for weighing. Making the scale part of the truck avoids weighing the truck itself, and supplies a net weight of material handled.

Lewis-Shepard Products, Inc.

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Box Trucks Made of Fibre

Light, strong, maneuverable Fedco Tough Baby box trucks have no rough edges or ends to snag or injure materials. Hard, vulcanized fibre bodies are finished smooth inside and out. All hardware and railings are specially treated to combat rust and corrosion. Load capacity of the standard (closed) model is 1200 lb. Special truck such as open side and drop side models constructed on order.

Federal Fibre Corp.

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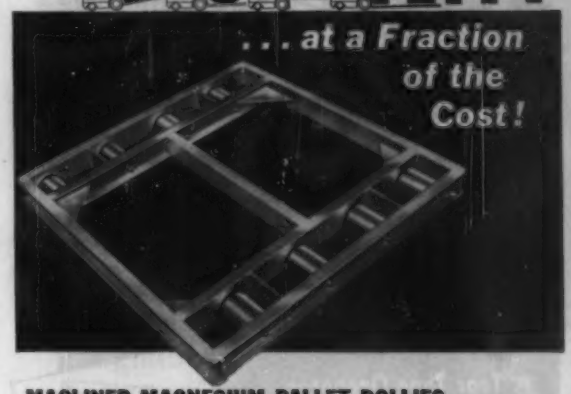
Rugged Terrain Carrier

Flex-Trac, a rough terrain cargo truck that bends in the middle, climbs 3-ft walls. It runs along 45° slopes without tipping, swims rivers, pushes through mud and sand, makes 56 mph on the highway. Clark is testing this Swiss-designed truck to see how good it is for construction work, logging, mineral hunting,

Circle 56 on Reader Service Card

Power Truck MOBILITY



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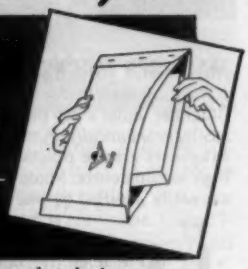

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MARTIN-DECKER "SENSATER" CRANE SCALE

Compact, low headroom loss, Crane Scale. High safety factor, low cost, light weight, accurate. Ideally suited for overhead weighing where operator has easy access to the indicator. Weigh during the normal handling operation, not as a separate, time-consuming function. The money saved is yours. Capacities 1,000 lbs. to 20,000 lbs.

Low Cost ■ Easy to Read ■ Compact ■ Easy to Handle
High Safety Factor (5 to 1) ■ Lightweight ■ Accurate

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WRITE FOR DESCRIPTIVE BULLETIN V-35
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3431 CHERRY AVENUE, LONG BEACH 7, CALIFORNIA

Precision Pressure Instruments—Testing—Weighing—Load and Force Measurement.

Circle 59 on Reader Service Card

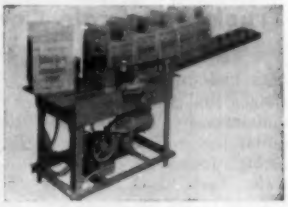
WHAT'S NEW IN EQUIPMENT

similar rough going. The truck can make itself swayback or humped because it's articulated (has chassis joints). It can hydraulically raise and lock any pair of wheels. It climbs with joints unlocked. All wheels are driven and braked. Fronts and rears are on arms that pivot from center axle. Differential locks; right and left brakes work separately. The 1- and 2-ton models weigh 3300 and 7100 lb. Removable propellors engage power take-off on transmission for water operation.

Clark Equipment Co.

Circle 169 on Reader Service Card

Case Printer Speeds Marking

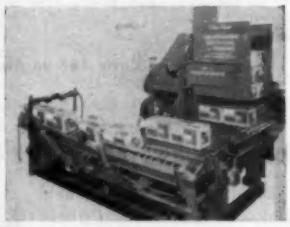


In-line printer turns out 45 marked cartons per minute to eliminate slow, cumbersome hand stenciling. The printer gives good-looking clear markings. Friction between the moving container and the marking head starts the cycle. Both ends of the box are marked at once. Ink is fed from a built-in reservoir by a felt transfer roller. The unit will keep pace with automated packaging equipment.

Industrial Marking Equipment Co.

Circle 170 on Reader Service Card

Air Runs Unstacker



Standard's new case and carton unstacker uses air cylinders for hoisting, clamping, and pallet movement instead of hydraulic power. Capacity is 45 cases per minute based on normal pallet delivery. Advantage of air operation is said to lie in a cushioning effect which prolongs machine and case life. More cleanliness is claimed—there is no oil film to collect minute dust particles. Maintenance is simplified. All conveyors and the pallet stacker, included as part of the machine, are electric driven. Air compressor with storage tank and all piping and pressure regulators are furnished.

Standard Conveyor Co.

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Handy Parts Cart

Easily loaded utility cart transports, stores and serves as rack at assembly positions. Use it for castings, thread and yarn spools, machined parts, order picking. It will go down aisles of any size. Adjustable in height and width, it's designed to go right over the top of any work place. Parts are within ready reach. Handling time is reduced; stooping and bending aren't necessary. Workers can turn the rack while loading and unloading it. Articles to be spray-painted and baked may stay right on the rack for both operations. You may store in-process items between stations. Detachable steel strips with pegs hold products of any size and shape. You add strips on for small

parts, take them off or remove pegs for big ones. The Hoof Utility Cart is sturdily constructed from steel tubing and aluminum castings.

Hoof Products Co.

Circle 172 on Reader Service Card

Front-End Loader Improved

H-90 Payloader series B models offer many improvements says the maker. Operating capacity of these diesel-powered units remains at 9,000 lb, but peak lift has gone to 18,000 lb. Wheel base is longer and tread wider. With greater weight, they combine for better balance and more stability under adverse conditions. Major improvements in the full power-shift transmission and torque-convertor give finer throttle response and better handling.

The Frank G. Hough Co.

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Pressure System Moves Grain

Pneu-Flow 10 is a low velocity, positive pressure system to convey free-flowing, light-weight materials. It can move 8 tons per hour of poultry or dairy feed 40 ft into a bulk truck. Pick-up can be from a feed mixer, bin outlet or any device where material will flow into the feeder. Conveying rate is adjusted by a crank.

Sprout, Waldron & Co.

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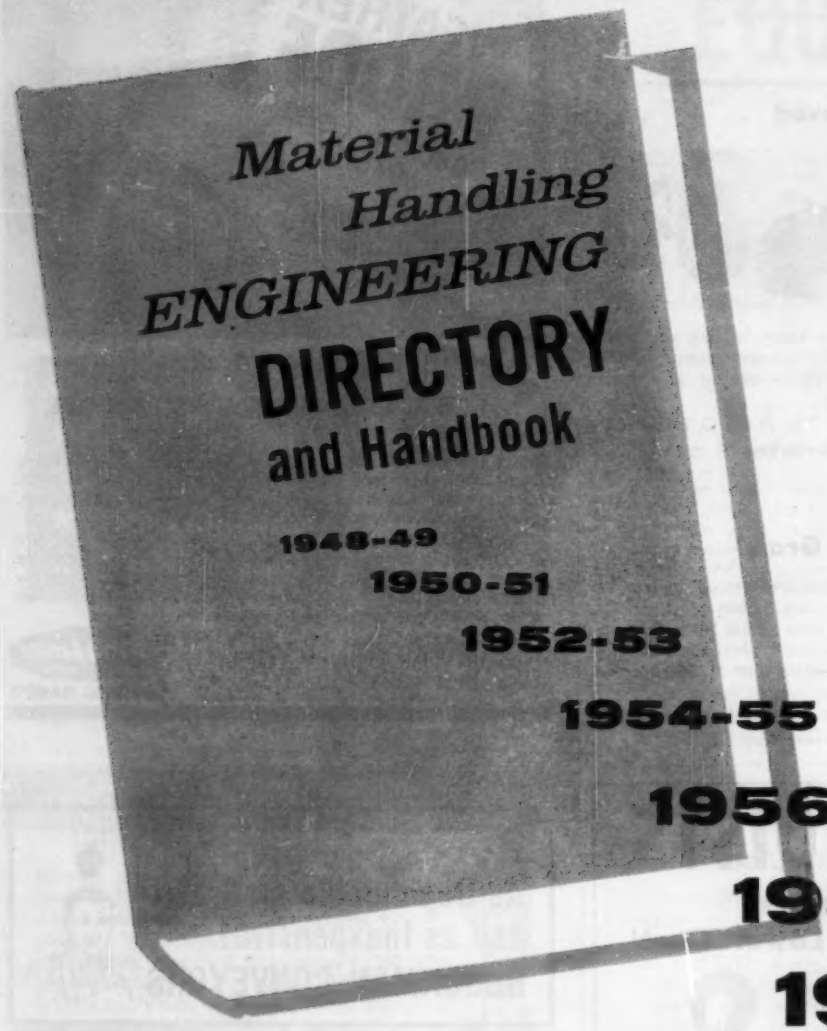

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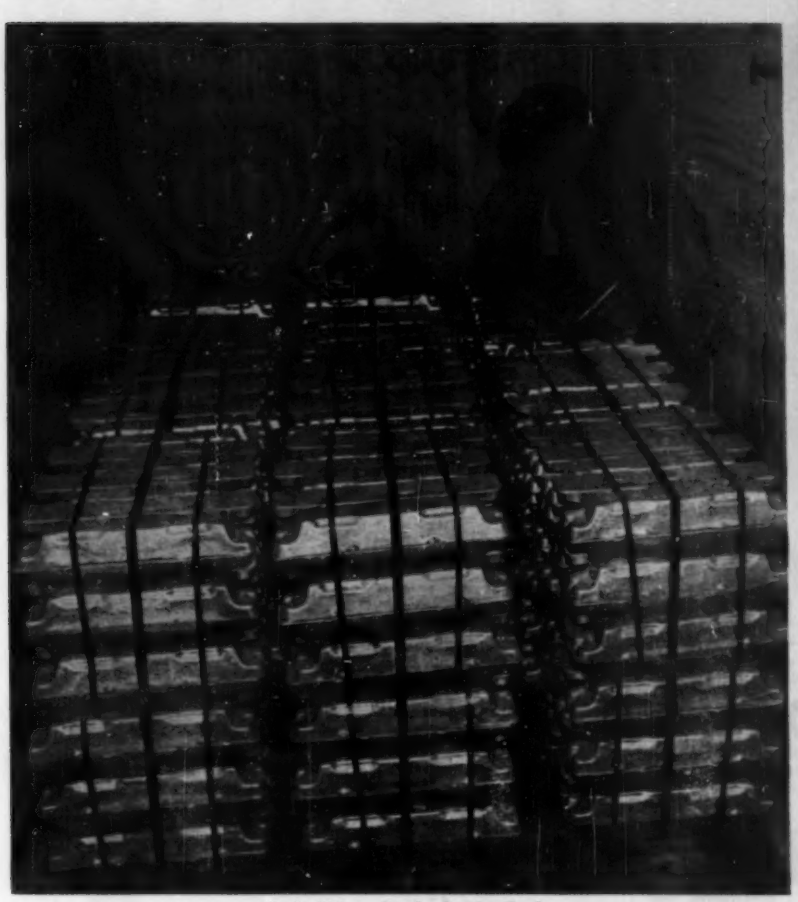

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BRACING METHOD uses steel strapping, controls movement of heavy loads in box cars or trucks. Here workman secures snubber band to strap.

Steel Strap Absorbs Shock

LOADS FLOAT in boxcars, save shipping time and money for Aluminum Company of Canada and its customers. The method absorbs shock, keeps ingot cargoes secure. Handling and storage are easy, too.

It wasn't always this way. Units of ingots loosened, disintegrated during handling and shipping. Alcan called in Acme Steel Company to work with its technical men.

They modified ingot shape. This allows stacking in more compact units. A unitizing method using flat steel strapping was developed. The new unit contains as many ingots as the old; needs less floor space and handles easier.

Boxcar load-bracing techniques were completely revised—possibly because of the new unit design. Snubber bands of 1¼" x .035" steel strap permit limited movement of the load—just enough to soak up shocks and impacts. Other bands pass through hold downs nailed to the floor under the load. The snubbers fasten to them.

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INDEX TO ADVERTISERS

	PAGE
*Allis-Chalmers	Cover II
American Dockridge, Inc.	17
*American MonoRail Co., Conveyor Div.	10
American Pulley Co.	27
*Barrett-Cravens Co.	12
*Bassick Co.	34
Beam Products Mfg. Co.	2
Big Joe Mfg. Co.	39
Bond Foundry & Machine Co.	30
*E. W. Buschman Co.	37
C & D Batteries, Inc.	10
Cady Metal Fabricating, Inc.	28
Cambridge Wire Cloth Co.	23
Canton Stoker Corp.	25
Columbian Rope Co.	10
Copperloy Corp., Div. of Lite-Line Industries	29
Crown Controls Co., Inc.	19
Diagraph-Bradley Industries, Inc.	35
*Dico Co.	26
*Divine Brothers Co.	29, 33
Durable Mat Co.	12
*Electrolift, Inc.	21
*Faultless Caster Corp.	4
Dave Fischbein Co.	19
A. J. Gerrard & Co.	21
Goodyear Tire & Rubber Co.	1
Hollaender Mfg. Co.	34
*Hyster Co.	3
Hytrol Conveyor Co.	19
Jiffy Mfg. Co.	36
Jorgensen Conveyors, Inc.	21
G. B. Lewis Co.	23
Lite-Line Industries Div., Copperloy Corp.	29
Loadstop Mfg. Corp.	32
Magline Inc.	23, 24, 33, 35, 37
Manning, Maxwell & Moore, Inc.	5
Martin-Decker Corp.	36
*Modern Light Metals	30
Morse Mfg. Co., Inc.	29, 30
*Moto-Truc Co.	28
New London Engineering Co.	28
*Nutting Truck & Caster Co.	13
The Paige Co.	24
Palmer-Shile Co.	6
*The Rapids-Standard Co., Inc.	15
*The Raymond Corp.	7
Ready-Power Co.	32
Roura Iron Works, Inc.	26
Service Recorder Co.	26
*Stanley Works	Cover III
*Sturdi-Bilt Material Handling Div., Union Asbestos and Rubber Co.	33
Thern Machine Co.	37
*Towmotor Corp.	9
Uhrden, Inc.	8
*Universal Hoist Co.	31

*For additional data, see the 1960/61 MHE Directory

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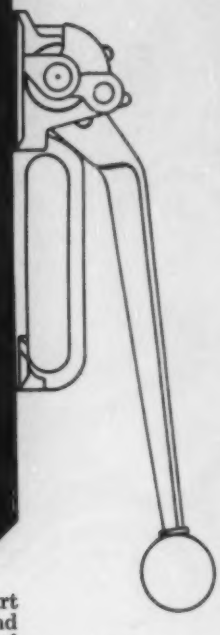

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